

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 2006

TUESDAY, MAY 17, 2005

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 2:28 p.m., in room SD-192, Dirksen Senate Office Building, Hon. Ted Stevens (chairman) presiding.

Present: Senators Stevens, Bond, and Inouye.

NONDEPARTMENTAL WITNESSES

OPENING STATEMENT OF SENATOR TED STEVENS

Senator STEVENS. Good afternoon. This is the afternoon for public witnesses for consideration for the fiscal year 2006 defense budget. We have 25 witnesses who have indicated they want to testify or submit statements for the record. To keep us on schedule, we are going to have to ask that you limit your testimony to 4 minutes each. I have to warn you there is going to be votes throughout the afternoon and Senator Inouye and I are going to be leap-frogging back and forth, and we have scheduled this this afternoon because we believe that there is going to be all sorts of problems on the floor tomorrow.

We do appreciate your interest and want you to know, as we have every year, we are going to review carefully the items you present to us. Your prepared statements will be included in the record in full, and when my good friend comes, Senator Inouye, our co-chairman, we will, as I indicated, share listening to your presentations.

Our first witness is Susan Lukas, the Legislative Director of the Reserve Officers Association of the United States. Ms. Lukas.

STATEMENT OF SUSAN E. LUKAS, LEGISLATIVE DIRECTOR, RESERVE OFFICERS ASSOCIATION OF THE UNITED STATES

Ms. LUKAS. Mr. Chairman, on behalf of over 75,000 members of the Reserve Officers Association (ROA), I would like to thank you for this opportunity to speak today.

The Reserve components have always relied on Congress to provide appropriations for their equipment requirements. While active duty considers Guard and Reserve needs, as you know, they do not always rate high enough to be funded in the President's budget. In particular, your subcommittee's support has been invaluable.

Our testimony this year mainly focuses on equipment needed for force protection and mission support. While one would not nec-

essarily think of Army trucks as offering personal protection, this war has shown us how vulnerable our people are when driving vehicles.

At a recent ROA convention, an Army non-commissioned officer (NCO) said he worked hard to train his soldiers how to drive in convoy, but nothing could prepare them for the conditions they had to operate under. He said one of the first things he learned was to drive as fast as if your life depended on it, because it did.

You can well imagine, between those conditions, the environment and demands, the fleet is aging quickly. For example, there are about 1,800 long haul tractor-trucks being used in Iraq. Forty percent of the fleet is at a 20-year life expectancy level. The new trucks will reduce fuel and can accept 2,900 pounds of up-armoring. This is but one example of the trucks that need replacement in the Army.

The Naval Reserve needs to meet mission requirements by replacing their C-9 fleet as it is not compliant with either future global navigation requirements or European flight restrictions.

Congress has supported appropriations for the littoral surveillance system and continuing support would allow the Naval Reserve to meet their homeland security mission and deploy this equipment with the fleet.

The Air Force Reserve equipment requirements focus on counter-measure protections such as the large aircraft infrared counter-measures system (LAIRCM), LITENING Pods, color radar for C-130s, and C-5 Airlift Defense Systems. I will not go into detail on the equipment as it is covered in our written testimony.

Several years ago ROA suspected stop-loss and mobilization would reduce recruiting and retention. Unfortunately, this has happened. The Reserve chiefs recently testified before your subcommittee that increased bonus authority has made a difference. While bonuses are an effective tool, ROA asks for consideration to fully fund advertising and marketing, tuition assistance, family support, special training, and school tours.

In closing, the bond between the United States (U.S.) military and our civilian communities is strengthened by the mobilization of neighbors and fellow workers, our reservists and National Guardsmen. The move toward using the Guard and Reserve to meet operational requirements is a natural evolution of this very capable force. However, force transformation needs to retain surge capability in order to meet emerging threats or demands. The Guard and Reserve can be configured to meet both operational and surge requirements.

I look forward to answering any questions you may have and again thank you for allowing me to speak to the subcommittee.

[The statement follows:]

PREPARED STATEMENT OF SUSAN E. LUKAS

INTRODUCTION

ROA's legislative goals for this year have focused on mobilization and recruiting and retention. These goals come from our members as they identify problems or suggest improvements to the situations they encounter. Since we are not in the Department of Defense's chain of command we provide a source for candid discourse without fear of retaliation. ROA will continue to support the troops in the field in any way we can.

A key factor in supporting the Reserve Components is funding their training needs. Cost avoidance cuts for the past 2 years have forced the services to take reductions in mobilization training, demobilization training, recruiting training, annual training, special training, and bonus authorities' accounts. ROA urges Congress to fully fund these accounts and reverse the cost avoidance reductions.

NATIONAL GUARD AND RESERVE EQUIPMENT

Army Reserve

Equipping both existing units and new units will be a considerable task. Units that deployed and took their equipment to combat have left the equipment in the theater. It may have even been damaged or destroyed. Many units were already short critical equipment. As the Army Reserve creates its "force packages" it is understood that the earlier deploying force package units will be equipped first. Other units will have "mission essential equipment for training" and as they move closer to their respective rotation dates, they will receive more of their needed equipment. There will also likely be increased use of pre-positioned equipment much the same as was done during the Cold War and to an extent is being done today. The Army Reserve has identified fiscal year 2006 as the "Year of Equipping." In doing so, they are giving particular emphasis to critical equipment shortfalls that will impact the transformation to rotational force packages, training, and mission accomplishment. Many of the items on the "Unresourced Equipment and Modernization Requirements" have not changed. Priorities may have moved up or down and quantities may have increased.

Light Medium Tactical Vehicle (LMTV)

This critical item was No. 1 in fiscal year 2005 and will remain the No. 1 equipment priority in fiscal year 2006. As indicated earlier, the Army Reserve's transportation role is crucial to mission accomplishment. The FMTV replaces many Vietnam-era trucks whose effective life cycle ended some time ago.

Required.—4,512; *Short.*—2,683; *Fiscal Year 2006 Buy.*—600; *Cost.*—\$91.8 million.

Medium Tactical Vehicle (MTV)

This item was No. 2 last year and remains the No. 2 equipment priority. The vehicles that the MTV's replace are past their useful life and the cost to keep them running can challenge the cost of procuring the newer and more efficient MTV. The requirement has not changed and the number that is currently on hand is staggeringly low.

Required.—8,784; *Short.*—6,712; *Fiscal Year 2006 Buy.*—800; *Cost.*—\$146 million.

Multi-Band Super High Frequency Terminal

The Army Reserve provides the majority of the Theater Signal management in the Army. The terminal provides inter-theater and intra-theater range extension support. The fiscal year 2005 buy would fill the requirement of one integrated Theater Signal Brigade.

Required.—50; *Short.*—46; *Fiscal Year 2006 Buy.*—10; *Cost.*—\$30 million.

Truck, Cargo PLS 10X10 M1075 and PLS Trailer

Again, the combat service support role of the Army Reserve highlights the need for the most current model. This requirement also includes the Tactical Fire Fighting Truck.

Truck/Trailer Required.—929/1,484; *Short.*—275/769; *Fiscal Year 2006 Buy.*—88/56; *Cost.*—\$25.4 million/\$3.0 million.

Improved High Frequency Radio (IRFR)

Provides voice transmission for battle command and is the primary means of communications for maneuver battalions.

Required.—1,750; *Short.*—937; *Fiscal Year 2006 Buy.*—937; *Cost.*—\$39.8 million.

High Mobility Multi-Purpose Wheeled Vehicle (HMMWV)

This is the standard version of the much used workhorse of the Army. All units need them. Many in the Army Reserve are older models and Active Army "hand-me-downs" that might not meet deployment standards when a unit is mobilized.

Required.—13,919; *Short.*—1,543; *Fiscal Year 2006 Buy.*—321; *Cost.*—\$24.0 million.

Up Armored High Mobility Multi-Purpose Wheeled Vehicle (HMMWV)

Much has been reported about the need for this critical vehicle in the combat zones. Many units are attempting to "up-armor" their vehicles in the theater with whatever might be available. This is a survival item and needs to be resourced.

Required.—738; *Short.*—705; *Fiscal Year 2006 Buy.*—308; *Cost.*—\$55.1 million.

Truck, Tractor Line Haul (M915A3)

These vehicles haul bulk fuel and supplies from port to combat areas for disbursement to brigades. About 1,800 trucks are currently being used in Iraq. Forty percent of the fleet is at their life expectancy level of 20 years and the current replacement plan would take many out to over 30 years old. The Line Haul Tractor would decrease fuel demands and maintenance costs. Fuel savings alone could buy 140 trucks. Most importantly the suspension system is configured to accept the 2,900 pounds of up-armoring required for each truck.

Required.—2,445; *Short.*—1,389; *Fiscal Year 2006 Buy.*—92; *Cost.*—\$87 million.

HEMTT Load Handling System

This requirement would fill the much needed requirement for the Improved Cargo Handling Operations and Medical Supply Companies. At the present time, there are none on hand in these units.

Required.—44; *Short.*—44; *Fiscal Year 2006 Buy.*—44; *Cost.*—\$10 million.

Tactical Fire Fighting Truck

This improved item of equipment is critical to both the Army Reserve's Engineer Fire Fighting units as well as Ammunition Support Teams.

Required.—72; *Short.*—43; *Fiscal Year 2006 Buy.*—10; *Cost.*—\$6.0 million.

Prior to 1997, the National Guard and Reserve Equipment Appropriation was a critical resource to ensure adequate funding for new equipment for the Reserve Components. The much-needed items not funded by the respective service budget were frequently purchased through this appropriation. In some cases it was used to bring unit equipment readiness to a needed state of state for mobilization. Frequently the funds were used to purchase commercial off the-shelf items that units were unable to obtain through traditional sources. However, in 1997 an agreement between the administration and Congress eliminated the account with the objective of the active component providing the needed funds through their individual appropriations.

The Reserve and Guard are faced with mounting challenges on how to replace worn out equipment, equipment lost due to combat operations, legacy equipment that is becoming irrelevant or obsolete, and in general replacing that which is gone or aging through normal wear and tear. Today, the ability to use NGREA funds for cost effective acquisition is virtually non-existent as the amount appropriated is a fraction of what the Army Reserve requires to meet immediate needs. An analysis has shown that with the implementation of the post-1997 policy, there has been an overall decrease in procurement for the reserve components. In fiscal year 2004, procurement for the Reserve Components as a percentage of the DOD procurement budget is at its second lowest in recorded history at 3.19 percent. This comes even after a congressional add of \$400 million for NGREA. Meanwhile, procurement for the Active Component continues to realize consistent real growth from fiscal year 1998 through fiscal year 2009 of 108.6 percent. In the past, the use of "cascading" equipment from the Active Component to the Reserve Component has been a reliable source of serviceable equipment. However, with the changes in roles and missions that have placed a preponderance of combat support and combat service support in the reserve components, there has not been much left to cascade. Also, funding levels, rising costs, lack of replacement parts for older equipment, etc. has made it difficult for the Reserve Components to maintain their aging equipment, not to mention modernizing and recapitalizing to support a viable legacy force. The Reserve Components would benefit greatly from a National Military Resource Strategy that includes a National Guard and Reserve Equipment Appropriation.

Naval Reserve

C-40

The Navy requires a Navy Unique Fleet Essential Airlift Replacement Aircraft. This aircraft was designated as the C-40A and will replace the aging C-9 fleet. Boeing offered the 737-700 new technology aircraft in response to the Navy's request for proposal.

The C-40A, a derivative of the 737-700C is a Federal Aviation Administration (FAA) certified, high performance, fixed wing aircraft that will accommodate 121 passengers, or 8 pallets of cargo, or a combination configuration consisting of 3 pallets and 70 passengers. The C-40A is able to carry 121 passengers or 40,000 pounds of cargo, compared with 90 passengers or 30,000 pounds for the C-9. In addition, the maximum range for the Clipper is approximately 1,500 miles more than the C-9.

Upgrading the aging C-9 Skytrain II airframe with new engines and avionics was considered, but that would leave new equipment in a 30-year-old+ airframe. The Navy's aging C-9 fleet is not compliant with either future global navigation requirements or noise abatement standards that restrict flights into European airfields. Twenty-two aircraft remain to be replaced.

A recent study by the Center for Naval Analyses recommends three additional C-40A be procured to meet global operational requirements and replace the C-9.

Littoral Surveillance System

Two Littoral Surveillance System (LSS) have been authorized by congress by fiscal year 2003. This provides timely assured receipt of all-weather, day/night maritime and littoral intelligence, surveillance and reconnaissance data. A third system would be used to support the Navy and would be an ideal mission to support Naval and Coast Guard Maritime Defense operations, when not deployed. The LSS system has been incorporated into the Joint Fires Network (JFN) and the cost for this new system is \$2.0 million per set.

JFN provides near real time intelligence correlation, sensor control and planning, target generation, precise target coordinates, moving target tracks and battle damage assessment capabilities to support more timely engagement of time critical targets. This capability allows a ship with the full JFN suite to share a greatly improved battlespace picture very quickly with other ships in the area of operations.

The system, along with the Army's Tactical Exploitation System-Forward and the Marines Tactical Exploitation Group, share a common software baseline, ensuring joint interoperability.

At least 141 Reservists have been trained to run the two systems, which is viewed as a Naval Reserve mission.

Air Force Reserve

C-5s

C-5s are unique national assets that are unrivaled in range and payload. Air Force and industry studies confirm the viability of the C-5 fleet (As and Bs) to serve until approximately 2040. These assessments resulted in the Air Force initiating a two-phased modernization program designed to improve C-5 reliability, maintainability, and availability. Modernization of C-5As assigned to the Air Force Reserve should be advanced concurrently with Air Force active duty units to include both the Avionics Modernization Program (AMP) and the Reliability Enhancement and Re-engineing Program (RERP). C-5 modernization is the most cost effective solution for generating strategic airlift.

Requirement.—ROA urges Congress to authorize and appropriate funds to modernize C-5As with AMP and RERP concurrent with active duty C-5Bs.

C-17

The C-17 Globemaster III is the newest, most flexible cargo aircraft to enter the airlift force. The C-17 is capable of rapid strategic delivery of troops and all types of cargo to main operating bases or directly to forward bases in the deployment area. The aircraft is also capable of performing tactical airlift and airdrop missions when required. The C-17 is the Nation's lowest risk program to increase capability.

Requirement.—Commitment needed beyond 180 in January 2006 due to long lead items. Additionally, consideration for procurement beyond 180 aircraft will support C-17s in the AFR and will increase the Nation's surge capability.

C-40C

Air Mobility Command's programmed force structure, based on C-9 retirement schedule, does not include more than three C-40s for the AFR even though a hearing before Congress by the Air Force stated the demand for airlift was more than the availability of aircraft. For instance, the appropriate number of Operational Support Aircraft (OSA) does not exist to sufficiently meet increasing Congressional Delegation, Combatant Commander, or team travel requests. Operations and Maintenance are unfunded in fiscal year 2006 and fiscal year 2007 for C-9s and C-40Cs.

Requirement.—Increase procurement of C-40 aircraft by at least six additional aircraft to ensure an adequate special mission airlift force for the AFR by at least two C-40s per year for 3 years.

C-130J

AFRC C-130E aircraft are reaching the end of their economic service life, are becoming difficult to support, and must soon be replaced. The Air Mobility Command has selected the C-130J to replace these 40+ year old aircraft for both active, Reserve, and Guard C-130E units. The C-130J is the latest version of the venerable C-130 Hercules and utilizes advanced composite materials, integrated digital avi-

onics and a state-of-the-propulsion system to provide significant performance improvements, new mission capabilities, and reduced life cycle costs. The recently executed C/KC-130J Multiyear Contract provides these aircraft at significant cost savings to the government while accelerating deliveries to units currently in conversion such as the 53rd Wing at Keesler AFB, MS.

Requirement.—ROA urges Congress to authorize and appropriate funds for the C/KC-130J Multiyear Procurement as requested in the President's Budget Request for fiscal year 2006.

Large Aircraft Infrared Countermeasures System (LAIRCM)

The AN/AAQ-24 V (13) LAIRCM is an infrared countermeasure system designed to protect both fixed and rotary wing aircraft against man-portable (shoulder-launched) infrared-guided surface-to-air missiles.

Requirement.—HC-130/C-130H3, \$225.1 million.

LITENING AT Advanced Targeting Pod

Precision Attack Targeting System program was developed to fill the need for precision strike capability in the Air Reserve Component (ARC). The 25 pods will be used in AFRC A/OA-10 and B-52 aircraft.

Requirement.—A/OA-10 and B-52, 25 pods, \$53.0 million.

APN-241 Low Power Color Radar for C-130s

The AN/APN-241 combat aerial delivery radar provides enhanced safety and operational performance for C-130 aircrews. It offers the tanker/transport community some of the same advanced technologies originally developed for fighter aircraft. These technologies include high-resolution ground-mapping modes that enable very precise navigational fixes and aerial cargo drops.

Requirement.—C-130H2, \$37 million.

C-5A Airlift Defensive Systems

The Air Force Reserve Command has a total of 32 C-5A aircraft in its inventory. Currently, that aircraft has no viable onboard defensive system against surface to air (SAM) missiles. Funds to pay for the Part A and B installation of AN-AAR-47 and ALE-47 defensive systems stripped from C-141 aircraft as these systems become available to the SPO.

Requirement.—C-5A 32 A/C \$30.0 million.

Situational Awareness Data Link for A-10s and HH-60s

The Situation Awareness Data Link (SADL) integrates U.S. Air Force close air support aircraft with the digitized battlefield via the U.S. Army's Enhanced Position Location Reporting System (EPLRS). More than just a radio or a data modem, SADL provides fighter-to-fighter, air-to-ground and ground-to-air data communications that are robust, secure, jam-resistant and contention-free. With its inherent position and status reporting for situation awareness, SADL provides an effective solution to the long-standing air-to-ground combat identification problem for preventing unintentional fratricide (http://www.raytheon.com/products/sadl_eplrs/).

Requirement.—A/OA-10 and HH-60, \$7.7 million.

MILITARY PERSONNEL

Recruiting and Retention

Army Reserve

As combat operations in Iraq and Afghanistan become "stability" operations, it is expected that the Army Reserve and National Guard will make up 50 percent or more of the force. Both the Active Component and the Reserve Component will move to a rotational plan that will provide both predictability and stability for soldiers. The Army Reserve will organize its units into "force packages" that will help ensure that Reserve Component Soldiers will be available for 1 year out of every 5 to 6 years. This predictability will ease the pressure on soldiers, their families, and their employers.

According to the Army Public Affairs announcement, May 3, 2005, "As of end of the April reporting period, Recruiting Command accessed 7,283 Soldiers for the U.S. Army Reserve, 79 percent of the year-to-date mission. The fiscal year 2005 Army Reserve recruiting mission is 22,175." For the month of April the command fell short by 37 percent. The bonus program from last year helped to reduce recruitment and retention losses but with all other conditions remaining the same both areas will still be below goals. To overcome this, the Army Reserve needs to fully fund their bonus program to \$149.5 million and increase AGR recruiter positions with funding to \$59.1 million.

Navy Reserve

There are several challenges facing the services with recruiting and retention. The Naval Reserve recruiting is softer than many of the Navy's leadership would like to admit. The USNR has been slow to implement recruiting bonuses and the result is that the USNR is behind the power curve when compared to the other services with recruiting incentives for prior service members. The combined recruiting command has falling short of USN and USNR goals, and its Reserves are receiving short shrift for recruiting priorities. Even though the Navy is supporting deep cuts for its Naval Reserve (10,300 in fiscal year 2006) the need to recruit for the USNR has not lessened. To meet its shortcomings, the USNR is turning to activating drilling Reservists to fill the recruiter gap. When a problem exists, you call up the Reserves.

Air Force Reserve

Prior Service Availability.—In a 10-year period the Air Force Reserve went from accessing 50,507 in 1992 to 14,950 in 2005 and this trend has continued for the past 3 years. All of the services are experiencing this trend as the Guard and Reserve have gradually shifted to an operational force. The significance of recruiting fewer prior service personnel is lower average levels of experience residing in the Reserve Components and loss of investment in specialty training. According to the Air Force Reserve the most frequent reasons ADAF separatees give for not joining AFRC are:

- Want to wait and see what happens (with world events);
- Have seen Reservists deployed and don't want to risk same;
- Done my time, not interested in continuing;
- Have been told Reservists are first to be deployed;
- Concerned Reserve status will negative impact civilian employment;
- Negative feedback from activated IMAs;
- Bad press coverage—impression active forces place Reservists & Guardsman on front lines.

Recruiting Non-Prior Service Personnel.—A decrease in prior service means an increase in the need for non-prior service personnel to meet recruiting goals. A corresponding increase in the need for training dollars results at a time when the administration wants to decrease budgets. The use of non-prior service also results in less availability of forces as they move through the training pipeline. Once formal professional military education is completed training continues in a member's specialty, which means it can take between 1 to 2 years before an individual can perform duty somewhat independently.

ROA recommends supporting bonus incentives and reverse cost avoidance reduction trends that cut the reserve personnel and technician accounts.

Mobilization/Demobilization Impacts to Recruiting and Retention

The impact of mobilization and demobilization does not rest just with the military member; it also affects their families and employers. This is important to note because they in turn factor in an individual's decision on whether or not to stay in the military.

Two of the biggest problem areas that ROA members continue to share information on are with medical and pay problems.

Comment: I am a mob'd reserve COL at Walter Reed with PTSD. The problem I see that Reservists and Guardsmen are seeing is that the burden of proof for absence of preexisting is on us. I have seen soldiers with severe PTSD (suicidal/homicidal) be valued by the board here at Walter Reed with 0 percent because they concluded he was bipolar when he entered service, never mind the war exacerbating the condition. I am seeing extremely low valuations of disabilities for loss of limb and other traumatic wounds.

Comment: Here's the issue in a nutshell: Soldiers, according to the Army Reserve Magazine, are eligible for Tricare benefits 90 days prior to mobilization. We have a group order from First Army. When soldiers call Tricare they are told that they cannot be enrolled in Tricare without an individual order. Soldiers are eligible for this insurance but cannot get it. Individual orders will not come until soldiers arrive at the Mobilization station. Basically, we're eligible, but there is no vehicle to provide this insurance. One example, our new officer's wife may be pregnant. (the 2LT type) They currently have no medical coverage. He is covered while on 29 day orders, but his wife has no coverage. According to the AR Magazine, he should be covered. This is a wonderful benefit, but de facto nothing has changed since individual orders, which are required to get coverage, don't come until the active duty period commences.

Comment: Just wanted you to know that DEERS has dropped my family from Tricare dental for the 4th or 5th time.

Comment: Well, today is Day 12 of 12 in a row, with a 3-day weekend ahead to recover. Of note, however—and I really hate to continue to bring up pay issues, but I (and hundreds of other recently demobilized reservists) have not been paid out accrued pay—and it's been over 3 months now. SOMEONE has to do something to force DFAS to pay us . . . but who? I'm convinced no one cares or they simply can't fight the bureaucracy. I am owed over \$6,000 (after taxes) . . . the issues with DFAS continue—that organization needs to be seriously investigated and heads need to roll! I will have to take out a loan rather than pay with the cash that I earned—how sad is that?

Comment: I just wanted to touch base with you prior to leaving active duty. I wanted to check on the status of any potential article that was being written and also any help from the ROA regarding the way that reservists (especially Army reservists) have been treated with regard to reimbursements and pay. Since October 1, I have been receiving only one-third of my normal paycheck. Fortunately, I will be demobilizing on November 9, 2004. Regardless, a large portion of any article written MUST include how DFAS (Indianapolis office) made multiple errors and, yet, reservists (and their families) are paying for their mistakes daily.

Comment: In late September I received a letter from DFAS stating that I had received per diem in error and now owed the government \$11,696. I contacted an individual at DFAS and he said that the Army had decided to use DOD Directive 4515.14 as a guide to determine payment of per diem for soldiers in the Washington, DC area. He also told me that there were lots of other soldiers in the same situation and everyone had been assessed with a debt for travel advances paid. I asked what could be done and he said that he will submit a request for waiver of debt for me to DFAS Denver. A few months later we learned that DFAS Denver had denied waivers close to 900 soldiers in this situation. We attempted to find out from DFAS Denver how to file an appeal of their decision to the Defense Office of Hearings and Appeals (DOHA) and received no help. October 1, I checked my bank account and discovered that my direct deposit was only \$548, I quickly determined that amount to be approximately one-third of my usual deposit and guessed that DFAS had decided to collect on the debt in the punitive manner of two-thirds confiscation. With no warning from DFAS or the Army that this was about to occur I was placed immediately in a dire financial situation. I sought help from Army Community Services by applying for a no interest loan from Army Emergency Relief only to be denied a loan because I only had 35 days left on active duty, which would not guarantee loan repayment.

Force Shaping

The U.S. Naval Reserve has become a test bed for Active and Reserve Integration (ARI) and Zero Based Review (ZBR). While these two policies make for good endorsements on transformation, the impact of these policies will have a negative impact on retention. The bottom line of these new policies has been a recommendation within the Presidential Budget of a cut of 10,300 to the USNR in fiscal year 2006. Many within the Naval Reserve question the validity of these recommendations. The near term plan for the USNR is to force shape to Army support; which isn't necessarily preparing the force for the next at sea battle.

The force being fashioned by Iraq is a USNR made up of SeaBee's, security forces, port security, custom agents and intelligence. This will be a more junior force. While the gain may be less in pay and compensation; the cost will be to experience and skill sets.

The Zero Based Review (ZBR) which has recommend cutting the Naval Reserve from and end-strength of 84,300 to about 64,000 members did not include all of the roles, missions and demands for Reservists. Among the roles left out of this calculation were joint, and homeland security requirements. Yet Congress is being asked to cut the USNR to 70,000.

To reverse a growing trend ROA recommends:

- Slow down and reduce the cuts planned for fiscal year 2006; at a minimum the cut of 10,300 should be spread out over 4 to 5 years.
- Determine what future roles the USNR will be supporting which could lead to increases in end-strength, and;
- Redo the USNR Zero Based Review to include joint and homeland defense requirements. This ZBR should be ongoing rather than periodic.

CONCLUSION

DOD, as we all know, is in the middle of executing a war—the Global War on Terrorism and operations in Iraq are directly associated with that effort. For the

Department, worries have emerged about additional spending during these military actions. Almost every initiative to include proposed changes to personnel practices and improvements in compensation programs are quickly placed under a "what will it cost?" scrutiny. It is ROA's view that this scrutiny is too often oriented toward immediate costs with a lack of appropriate regard for long-term results versus life cycle costs. This is not to say that prudent, fiscal personnel and budget policies and processes should be ignored. At all times what is being achieved should respectfully be balanced with how something is being achieved.

From a positive aspect, DOD's work to change and transform is admirable. Although many issues effecting Reservists are difficult and complex, the Departments of Defense, Homeland Security, Health and Human Services have all accomplished much in streamlining and updating mobilization and demobilization and in working health care challenges of wounded military members. There are still areas that need scrutiny such as depot support and regeneration costs for equipment and training. The war on terrorism is our Nation's first threat and this threat will not go away. The Reserve Components will take part in countering this threat for many years to come which offers us the best opportunity to resolve these issues once and for all.

Senator STEVENS. Thank you very much, Ms. Lukas. I am sure you realize that this base closure process we are going through is to free up money to modernize some of that equipment, just as you indicated. We do have a vast need for improved trucks and improved vehicles. We are sending the Strykers over there so that they can drive them 65 miles an hour and still be safe. But there are not enough of them over there yet.

But I thank you very much for your testimony and hope you will be pleased with the results.

Ms. LUKAS. Thank you, sir.

Senator STEVENS. Thank you very much.

Next is Command Master Sergeant Retired Mark Olanoff, Retired Enlisted Association. Yes, sir. Nice to see you again, sir.

**STATEMENT OF COMMAND MASTER SERGEANT MARK H. OLANOFF,
U.S. AIR FORCE (RETIRED), EXECUTIVE DIRECTOR, THE RE-
TIRED ENLISTED ASSOCIATION**

Sergeant OLANOFF. Good to see you again, sir, Mr. Chairman.

First I would like to start and thank you and Senator Inouye for everything you have done for us, because, you know, over the years we have come to see you and talked about issues that really are not within your purview, like concurrent receipt and survivor benefit offsets and health care for those over 65, which is now TRICARE for Life.

You told us at one hearing, you might remember, a few years ago that we had to go to the authorizing committee to fix those problems, and we did that. Here is the debate that happened in the fiscal year 2001 conference report, in which virtually every Senator who spoke supported the improvements for health care. I just want to read a couple points that Senator Warner had to say.

He said that: "I turn now to what is the most important single item in this conference report, military health care, particularly for our retired personnel and their families. History shows they are the best recruiters of all."

In another part of the record he says: "Two weeks ago in the testimony before the Senate Armed Services Committee and the House Armed Services Committee, General Hugh Shelton, Chairman of the Joint Chiefs of Staff, and each of the service chiefs strongly supported making this benefit permanent and using the accrual amount method of financing. The Joint Chiefs have repeat-

edly testified that failing to honor the commitment to our retirees has been detrimental to their recruiting and retention efforts.”

Yet today we see op-ed pieces put out by the Pentagon that now say that military retirees are a drain on the active duty force and the Reserve component. This is far from the truth. As you know, Mr. Chairman, your subcommittee appropriates money for discretionary funding. We won the battle on TRICARE for Life through the Armed Services Committee, not here. We won the battle on concurrent receipt through the authorizers and it was paid for through the Treasury, not from the Defense Department. The survivor benefit correction that was done in last year’s defense bill was offset by crazy accounting the way they do things here, but there was an offset of mandatory funding. We did not buy tankers that we were going to buy.

So for the Pentagon to now say that we are a drain on their budget is totally unfair. The last point, Mr. Chairman, is I did some checking to find out why the Pentagon does not talk about civilian retirees, why they are not a drain on their budget. There is a good reason. I found out that the health care—72 percent that the Government funds for retirees of the civil service—is funded through the Office of Personnel Management (OPM) budget, which means there is no accrual accounting like there is for TRICARE for Life.

So I believe that we have an obligation to fund military health care for military retirees who have earned their benefits. Again, I would like to thank you very much for everything that you have done to help us over the years.

Thank you, Mr. Chairman.

Senator STEVENS. Thank you very much.

I was just talking about looking into that. We will look into that.

Sergeant OLANOFF. Thank you, sir.

Senator STEVENS. We appreciate it.

[The statement follows:]

PREPARED STATEMENT OF MARK H. OLANOFF

Mr. Chairman, it is an honor for The Retired Enlisted Association to testify on our concerns for military and veterans’ before your committee.

The Retired Enlisted Association is a Veterans’ Service Organization founded 42 years ago to represent the needs and points of view of enlisted men and women who have dedicated their careers to serving in all the branches of the United States Armed Services active duty, National Guard and Reserves, as well as the members who are doing so today.

FUNDING FOR ACTIVE DUTY, NATIONAL GUARD AND RESERVE FORCES

The Retired Enlisted Association generally supports the administration’s request to support today’s troops and looks forward to working with the committee to that end. TREA is working on issues with the Senate Armed Services Committee to improve the quality of life for all components, retirees and their survivors.

DOD HEALTH CARE

I would like to start with a statement made by Senator John Warner (Virginia), Chairman of the Senate Armed Services Committee during the debate on the fiscal year 2001 National Defense Authorization Act concerning the Healthcare provisions:

“I turn now to what is one of the most important single item in this conference report—military healthcare, particularly for our retired personnel and their families. History shows they are the best recruiters of all.”

The conference report before the Senate fulfills an important commitment of “healthcare for life” made by the recruiters—the U.S. Government—beginning in World War II and continuing through the Korean war and the Viet Nam war. The goal of making that commitment was to encourage service members to remain in uniform and become careerists. Simply put, a commitment of health care for life in exchange for their dedicated career service.

Again, this convergence report fulfills the promise of healthcare for life. I am proud of the bipartisan unanimity with which the Senate Armed Services Committee supported this initiative—an initiative never taken before by a congressional committee.

Let me describe for my colleagues and for our active and retired service members around the world the legislation in this conference report to authorize health care benefits for Medicare-eligible military retirees and their families, and how we arrived at this outcome.

For as long as I can remember, military recruits and those facing re-enlistment have been told that one of the basic benefits of serving a full military career is health care for life. We all know now that this commonly offered incentive was not based in statute, but was, nonetheless, freely and frequently made; it is a commitment that we must honor.

Let me briefly review the history of military health care. Military medical care requirements for activity duty service members and their families were recognized as early as the 1700’s. Congressional action in the last 1800’s directed military medical officers to attend to military families whenever possible, at no cost to the family. During World War II, with so many service members on activity duty, the military medical system could not handle the health care requirements of family members. The Emergency Maternal and Infant Care Program was authorized by Congress to meet this need. This program was administered through state health agencies.

The earliest reference in statute defining the health care benefit for military retirees was in 1956 when, for the first time, the Dependent’s Medical Care Act specified that military retirees were eligible for health care in military facilities on a space-available basis. In 1966, this Act was amended to create the Civilian Health and Medical Program of the Uniformed Services, CHAMPUS, to supplement the care provided in military facilities. This legislation, in 1966, specifically excluded from coverage military retirees who were eligible for Medicare—a program which had been enacted by the Congress 1 year earlier, in 1965.

The exclusion of over age 65, Medicare-eligible military retirees from guaranteed care from the military health care system was masked for many years because the capacity of military hospitals and the military medical system exceeded that required to care for active duty service members; therefore, many Medicare-eligible retirees were able to receive treatment, on a space-available basis, at military facilities. In the 1990’s, we began to reduce the size of our military services and the base realignment and closure, BRAC, rounds began to close bases—and military hospitals—all across the Nation. The combined effect of fewer military medical personnel to provide care and the closure of over 30 percent of the military hospitals eliminated the excess capacity that had been so beneficial to military retirees. Also during this decade the retiree population grew dramatically, adding pressure to the military health care system. The true magnitude of the problem was finally exposed.

All of us have heard from military retirees who served a full career and, in so doing, made many sacrifices. Many times the sacrifices these heroic veterans made resulted in serious medical conditions that manifested themselves at the time in their lives when they were pushed out of the military health care system. As a nation, we promised these dedicated retirees health care for life, but we were ignoring that promise.

On February 23, 2000, I introduced a bill, S. 2087, that provided for access to mail order pharmaceuticals for ALL Medicare-eligible military retirees, for the first time. The legislation also would improve access to benefits under TRICARE and extend and improve certain demonstration programs under the Defense Health Program.

On May 1, 2000, I introduced S. 2486, which added a retail pharmacy component to the previous legislation, providing for a full pharmacy benefit for all retirees, including those eligible for Medicare.

On June 6, Senator Tim Hutchinson and I introduced S. 2669, a bill that would extend TRICARE eligibility to all military retirees and their families, regardless of age. Later that same day, I amended the defense authorization bill to add the text of S. 2669. This legislation provided uninterrupted access to the Military Health Care System, known as TRICARE, to all retirees.

Permanently funding the military retiree health care benefit will be seen by retirees, active duty service members and potential recruits as the Nation keeping its commitment of health care for life to military retirees. Those serving today and

those who are joining the military will see that the promise of a lifetime of health care, in return for serving a full career, will be honored in perpetuity.

Two weeks ago, in testimony before both the Senate Armed Services Committee and the House Armed Services Committee, General Hugh Shelton, Chairman of the Joint Chiefs of Staff, and each of the service chiefs strongly supported making this benefit permanent and using the accrual account method of financing. The Joint Chiefs have repeatedly testified that failing to honor the commitment to our retirees has been detrimental to their recruiting and retention efforts."

TREA is very concerned with recent articles in national newspapers that the Department of Defense is worried that costs for military retiree benefits are taking funds away from the troops. These statements are not accurate.

TREA urges the subcommittee to fully fund DOD's health care account to include a seamless transition with the Department of Veterans' Affairs. Further, TREA recommends report language that specifically prohibits the Department of Defense from raising TRICARE co-payments in fiscal year 2006. Finally, TREA recommends an oversight hearing with the Department of Defense and stakeholders to discuss differences between entitlement and discretionary spending.

BASE REALIGNMENT AND CLOSURE

TREA realizes that this subcommittee has very little to do with the BRAC process, however, section 726 of the fiscal year 2004, National Defense Authorization Act (Public Law 108-136) states "Working group on military health care for persons reliant on health care facilities at military installations to be closed or realigned". Although this working group has been established by DOD and the group has had one meeting, this issue will become very important after the BRAC list is finalized.

TREA urges the subcommittee to be aware of this issue when appropriations are made to fund BRAC.

CONCLUSION

TREA is very grateful for this opportunity to testify before the Defense Appropriations Subcommittee and would like to thank Chairman Stevens and Ranking Member Inouye for their many years of support to the defense of our country.

Senator STEVENS. Our next witness is Retired Captain Marshall Hanson, Chairman of the Association for America's Defense. Yes, sir.

STATEMENT OF CAPTAIN MARSHALL HANSON, U.S. NAVAL RESERVE (RETIRED), CHAIRMAN, ASSOCIATIONS FOR AMERICA'S DEFENSE

Captain HANSON. Thank you, sir. Mr. Chairman, the Associations for America's Defense (A4AD) are very grateful to testify today on issues of national defense equipment and force structure. We would like to thank this subcommittee for its stewardship on defense issues and setting the example by its nonpartisan leadership.

Support for our deployed troops continues to be a priority and warrants top importance. The Reserve Enlisted Association, which belongs to A4AD, had one of its members mobilized by the marines who is currently in Iraq. When asked about up-armoring of vehicles in country, I got an answer from this sergeant by e-mail just yesterday that I would like to share with the subcommittee. He said:

"Sometimes I see soldiers going out in home-armored vehicles. We call them grenade buckets. Our teams have two vehicles and one of them is a bucket, though this week we will be getting it refurbished. They are going to take off the homemade armor and add higher sides, higher back gate, generation three armor doors, and armor the cab's canvas roof. Unfortunately, I was told that we will still need to add the Kevlar blast pads on the rear wheel wells because the armor does not protect the troops that sit in the back. Another problem is that these pads can catch fire.

"The insurgents have started using antitank mines, which have killed about four soldiers in the next area of operation. We had a first sergeant here who may lose his leg. We cannot really armor a Hummer enough to stop these mines. We do the best we can with the armor and use our intel, tactics, and procedures to stop the improvised explosive devices (IEDs) and car bomb attacks.

"Overall, the main difficulty with the up-armoring is the logistics with getting the vehicle to the up-armor location. They expect us to take off the welded homemade armor without technical support and then there is the risk of driving the unprotected vehicle to the armoring sites. Both vehicles we use have some wear and tear and could use refurbishing. This is the standard around here, although the 7-ton truck and the light medium tactical vehicles (LMTV) are in good condition." End quote.

A4AD is concerned about this wear and tear on fielded equipment and how our soldiers and marines who are returning from the combat theater without equipment because they must leave it behind. For the demobilized, readiness will become an issue because there is no equipment left to train on. Included in our written testimony is a list of unfunded equipment we would like to see procured for Active and Reserve components.

It also should be remembered that equipment is only as good as the people who use it. We believe Congress must continue to make it a high priority to increase end strengths because this type of combat we are seeing is stressing our military troops. People are more than just human capital assets and if they are overtasked and undervalued we will see a growing recruiting and retention problem.

Further, proposed cuts to some of our Guard, Reserve, and Active services may be sending out the wrong message to future adversaries and to our troops in the field. Increases should be made to both the Active and Reserve components as the Department of Defense (DOD) missions will continue beyond just the operational, to include strategic contingencies and homeland defense.

We are at a point in our history where we are defending our national interests at the same time that we are defining our future security systems. Let us not overstep our capabilities at the risk of defense. The responsibilities that you bear toward the future are great and I am sure the opinions you are given are many.

Thank you for your ongoing support of the Nation, the armed services, and the fine young men and women who defend our country. I am available for any questions.

[The statement follows:]

PREPARED STATEMENT OF MARSHALL HANSON

INTRODUCTION

Mister Chairman and distinguished members of the committee, the Associations for America's Defense (A4AD) are very grateful for the invitation to testify before you about our views and suggestions concerning current and future issues facing the defense appropriations.

The Association for America's Defense is an adhoc group of 12 military and veteran associations that have concerns about national security issues that are not normally addressed by The Military Coalition, and the National Military Veterans Alliance. Among the issues that are addressed are equipment, end strength, force structure, and defense policy. Collectively, we represent about 2.5 million members, who are serving our Nation, or who have done so in the past. The number of supporters

expands to beyond 5 million when you include family members and friends of the military.

A4AD, also, cooperatively works with other associations, who provide input while not including their association name to the membership roster.

CURRENT VERSUS FUTURE; ISSUES FACING DEFENSE

The Associations for America's Defense would like to thank this committee for the on-going stewardship that it has demonstrated on issues of Defense. At a time of war, its pro-defense and non-partisan leadership sets the example.

Members of this group are concerned that U.S. Defense policy is sacrificing future security for near term readiness. So focused are our efforts to provide security and stabilization in Iraq, that risk is being accepted as an element in future force planning.

A Pentagon criticism is that our Armed Forces are archaic; structured for a Cold War. Instead, transformation is now being touted that would now emphasize "boots on the ground," while at the same time it encourages technological improvements that would jump a generation of weapons. Yet force planning is being driven by the Global War on Terrorism, plans to democratize the Middle East, and to allow for budget limitations. Cuts are being suggested for legacy weapons and infrastructure to pay for current operations and future combat systems.

What seems to be overlooked is that the United States is involved in a Cold War as well as a Hot war. While the United States is preoccupied with the Middle East and with the near-term crisis posed by North Korea's, China expands its influence over Africa, South America, and the underbelly of the former Soviet Union. It builds a military designed to counteract American military, and is erecting a Chinese stronghold of territorial claims and international lawfare.

Our military leadership defends its policy with proud display, testifying to the fact that our aircraft, missiles and ships have a greater capability and effectiveness than ever in the past. Yet within the last decade, our picket lines of defense have been gapped several times to respond to distant crises. Platform numbers and location are as significant as accuracy and payload.

China is the elephant in the war room that many force planners hope will just go away. As the United States expends resources in the Middle East and re-structures the military to fight terrorism, China patiently waits for America to weaken by withdrawing itself globally by transforming into a smaller force. China also awaits for another advantage which could be caused by the GWOT: the erosion of the American national will.

The Pentagon has suggested that technology will keep us ahead. By reducing procurement of the next generation of systems that are already planned by the armed services, and by pouring money into future combat systems DOD claims that we will maintain a tactical advantage. The question asked by many within the A4AD, will our adversaries wait until we attain this future?

FORCE STRUCTURE CONCERNS

Aging Equipment

Tactical Air.—The rapidly aging F-15 Eagles first flew in the 1970's. In recent mock combat against MiG, Sukhoi and Mirage fighters, foreign air forces scored unexpected successes against the Eagles. What is characteristic of paradigm shifts in air superiority is that they are invariably driven by one or another technological advance. New air dominance platforms are urgently needed. The F/A-22 Raptor and the Joint Strike F-35 fighters represent vital and complementary capabilities.

Airlift.—Hundreds of thousands of hours have been flown, and millions of passengers and tons of cargo have been airlifted. Both Air Force and Naval airframes and air crew are being stressed by these lift missions. Procurement needs to be accelerated and modernized, and mobility requirements need to be reported upon.

Fleet Size.—The number of ships in the fleet is dropping. At the end of April, the Navy had 288 ships. The Chief of Naval Operations, Admiral Vern Clark, in testimony before Congress talked about a 260 ship fleet by the year 2035.

Under the 260-ship plan, ship purchases and spending would show a peak-and-valley pattern over the 2006-2035 period. Through 2015, the Navy would buy an average of 9.5 ships per year, at an annual cost of about \$14.4 billion. The fleet would peak at 326 ships in 2020 and then gradually decline to 260 by 2035. The mid-to-late 2020's would be a period of low ship purchases under the 260-ship plan.

As recently as 2003, the U.S. Navy was telling Congress that its long-term goal was a 375-ship Navy. According to Admiral Clark, the 260-ship plan would cost about \$12 billion a year for ship construction, and the 325-ship plan would cost about \$15 billion a year for shipbuilding.

The administration procurement rate is too low and has yet to even reach a 9.5 ships per year procurement rate to support a build-up toward 2020. It appears that the Navy won't even attain the numbers discussed by the CNO before Congress.

Admiral Clark has accepted the DOD premise that technology can replace humans, and now seems to favor a smaller Navy because of lower cost and reduced manpower. He has also instituted new procedures like surging aircraft carriers to meet crises and keeping ships deployed overseas while rotating the crews. To some this means the Navy will need no more than 325 ships and possibly as few as 260. Yet this also means we will wear out people and equipment faster.

A4AD favors a larger fleet because of an added flexibility to respond to emerging threats. It is also believes that Congress should explore options to current ship design, configuration, and shipbuilding methods which have created billion dollar destroyers.

A Changing Manpower Structure

Air Force.—Compared to the Cold War Air Force, today's USAF is small and based mostly in the United States, necessitating rapid, large-scale deployments over long distances. Over the last two decades, the active duty Air Force was reduced by nearly 40 percent—from 608,000 to 359,000 uniformed members. Higher retention rates have caused the active duty force to expand temporarily to 375,000. Now the Air Force must shrink by some 16,000 Airmen in order to meet the fiscal year 2005 authorized force level of 359,000 people. While the force shrinks, operations tempo at stateside and overseas bases remains high. Airmen are working long hours, deploying with ever-increasing frequency to hot spots around the world, and spending more time away from their families. To accommodate the new steady state, service leaders have extended overseas rotations for each Air and Space Expeditionary Force (AEF), raising it from 90 days to 120 days. Combat deployments have been extended. Crews are flying longer missions and have less ground time between missions.

Air Guard and Reserve.—Across the board, the Total Force is straining to meet new requirements and challenges. The Air National Guard and Air Force Reserve have been activated at unprecedented levels. Since September 11, 2001, the Air Force has mobilized nearly 65,000 Guardsmen and Reservists. Together, they constitute 20 percent of Air Force AEF packages supporting operations in Southwest Asia. Additionally, they conduct 89 percent of air patrols over American cities in support of Operation Noble Eagle. In spite of enormous challenges, morale throughout the Total Force remains high. Senior Air Force leaders at present do not seek an increase in USAF end strength.

A4AD cautions that if the level of operations continues at the current pace, a decision to request more manpower cannot be avoided. The bottom line is that resources must be matched to tasking.

Army.—The Active Army is currently re-structuring all three components (Active, Reserve, Guard) in an attempt to create 77 Brigade Combat Teams and the necessary support organizations. To do this, the Army has a short-term increase in end strength of 30,000. Many in Congress feel that the increase should be permanent and possibly increased further.

As part of its efforts to increase the number and deployability of the Army's combat brigades, the Pentagon has begun the Army's Modularity Program. The fiscal year 2006 request contains no funding for the program.

Army Reserve.—The Army Reserve has a mandated end-strength of 205,000. It is likely that they will not end the year within the 2 percent variance authorized by Congress. It should be considered that part of the Active Army end-strength increase should be devoted to full-time support in the Army Reserve and Guard. This would enhance readiness as well as provide important mentoring to soldiers in anticipation of future deployments. At the present time, although retention in the Army, Army Reserve and Army National Guard remains high, recruiting challenges continue. A4AD anticipates that there will be an increased need for monetary incentives in all components.

Navy.—The official Navy posture is that its force level will reduce from approximately 360,000 sailors today to something in the neighborhood of 315,000 by the year 2012. A4AD has had an internal debate among its own membership on this manpower policy, some favor cuts, while others favor increases. Manpower is expensive, but it is people, not technology that have always won past battles and salvaged ships. If we tailor our fighting force too tightly with a level that is too low, we could create a force without indemnity.

Naval Reserve.—New Navy policies have lead to a recommendation within the Presidential Budget of a cut of 10,300 to the USNR in fiscal year 2006. A4AD disagrees. At a time when the USN plans to cut the active force, these skillsets of these

people should be placed into the Naval Reserve. Yet rather than increase the USNR as a hedge against policy, the Navy wants proportionally bigger cut from its Reserve.

The Zero Based Review (ZBR) which has recommended cutting the Naval Reserve from an end-strength of 84,300 to about 64,000 members did not include all of the roles, missions and demands for Reservists. Among the missions not included in this review were joint, homeland security requirements, spec-ops and non-planned M-day demands. Aviation hardware units were also not included in the ZBR.

Further, proposed civilianization of drilling Reserve and Full Time Staff billets do not address the call for war fighting skills and risks. A prime example is the Naval Reserve Construction Seabees Battalions, which were proposed for reduction prior to 9/11, are now touted as the USNR's best assets.

At a minimum, the proposed USNR fiscal year 2006 cut needs to be spread over a number of years, and the Naval Reserve roles and missions needed to be examined.

Marines.—As the Marine Corps is increased in size, the USMC wants to maintain the right number and mix of trained experienced Marines with first tour recruits. Ideally, 70 percent of the USMC is first tour, with the remaining 30 percent on extended service. With an expanded force, this ratio has been changing so that the number of first tour Marines is growing beyond the 70 percent. The Marine Corps will need to retain a greater number of individuals to offset new trainees with experienced leadership. Gradual increases need to be implemented to maintain the ratio of first tour to experienced Marine.

Marine Forces Reserve.—With a similar ratio as the Active component, historically 70 percent of the USMCR force has been non-prior service. But this ratio has now climbed past 74 percent which causes concern. Retention is also becoming a challenge which exasperates the non-prior service ratio. No immediate increase beyond 500 additional would be recommended for the USMCR.

Coast Guard Reserve.—The Coast Guard Selected Reserve has been held to 8,100 members by appropriation restriction, and no one in the Coast Guard leadership has been an advocate to ask for additional funding to even cover for the 10,000 billets that have been authorized by the Armed Services Committees.

The 8,100 manning level is no higher than it was prior to the terrorist attacks on September 11. Yet, the number of missions for the Coast Guard Reserve has increased. Coastal maritime defense is considered by many to be the most important challenges facing the United States today. Two requirements based studies conducted since 9/11 recommended that the USCGR strength be increased to 17,353 and 18,031 respectively. USCGR appropriations need to support authorization levels.

Increasing End Strength

The Army's fiscal year 2006 budget request does not include funding for its 30,000-troop increase, nor does the Marine Corps request include funding for a 3,000-troop increase. Total estimated cost for the additional forces is \$3.5 billion.

A4AD has continuing concerns about the mismatch between reducing active duty and reserve force strengths and the increasing mission requirements. While retention rates remains high, the effects of the heightened OPTEMPO are beginning to have a measured impact. If the current Active Duty end strength was adequate, the demand for Reserve and Guard call-up would not be so urgent.

End strengths need to be closely examined by both the House and Senate as a first step in addressing this situation.

Regeneration/Resetting of Equipment

Aging equipment, high usage rates, austere conditions in Iraq, and combat losses are affecting future readiness. Equipment is being used at 5 to 10 times the programmed rate.

Additionally, to provide the best protection possible for Soldiers and Marines in the combat theater, many units have left their equipment behind for follow-on units, and are returning with no equipment. Without equipment on which to train after de-mobilization, readiness will become an issue.

The Army, Army Reserve, Army National Guard, Marines and Marine Forces Reserve need continued funding by Congress for equipment replacement.

Counter-measures to Improvised Explosive Devices

A4AD would like to commend the committee for supporting enhanced counter-measures for air and ground troops now deployed. For ground troops, the biggest threat to safety remains the improvised explosive device or IED. As you know, these devices use simple electronic transmitters—like garage door openers, remote controls for toys or cell phones—to detonate a disguised explosive as a convoy or unit

on patrol passes by. These devices are usually well concealed in ordinary roadside debris like tires or dead animals. One response of the Congress to this extraordinary threat to our ground forces has been to call for and fund the accelerated purchase and deployment of up-armored Humvees.

A4AD would like to point out to the committee, however, that Humvees are not the only vehicle operated in theater and that the emphasis on up-armoring one type of vehicle has left others with little to no protection. For example, by up-armoring Humvees, we provide a greater degree of safety for troops escorting a convoy, but no additional protection for those troops driving the large supply trucks that are part of the same convoy. Cost-effective solutions that can provide an enhanced degree of safety do exist, however, in the form of electronic countermeasures. These devices work in one of two ways: either by pre-detonating an IED or by preventing the detonation through jamming of the signal. The committee has already seen fit to support the deployment of these types of solutions through the reprogramming of \$161 million in last years' supplemental for Iraq and Afghanistan operations, but we believe that more remains to be done. We would encourage and request the committee to look at specifying that additional funds be made available for the purpose of purchasing and deploying more electronic countermeasures for ground troops. In this way we can provide a greater degree of safety to all of the troops facing the IED threat, no matter what type of vehicle they may be operating.

Continued emphasis is needed for the procurement of sufficient quantities of countermeasures to protect every unarmored personnel carrier now deployed in the battle space.

Aircraft Survivability Equipment

As for air crews, they face non-traditional threats used by non-conventional forces and deserve the best available warning and countermeasure equipment available to provide the greatest degree of safety possible. As an example of this threat, one need only look at the downing of a privately-operated helicopter as recently as 1 month ago. A4AD hopes that the committee will continue to support the purchase and deployment of warning and countermeasures systems for both fixed and rotary wing aircraft across all of the services and insure that the latest and most advanced versions of these protections are made available to all units now deployed or slated for deployment in the future—be they active duty, Guard or Reserve.

Continue to support the purchase and deployment of warning and countermeasures systems for both fixed and rotary wing aircraft across all of the services and insure that the latest and most advanced versions are available.

Maintaining the National Guard and Equipment List

Pressure continues within the Navy and the Coast Guard to combine various appropriations so that Reserve equipment accounts would be merged with that of the parent service.

A single equipment appropriation for each service would not guarantee that the National Guard and Reserve Components would get any new equipment. The National Guard and Reserve Equipment Account (NGREA) is vital to ensuring that the Guard and Reserve has some funding to procure essential equipment that has not been funded by the services. Without Congressional oversight, dollars intended for Guard and Reserve Equipment might be redirected to Active Duty non-funded requirements. This will lead to decreased readiness.

This move is reminiscent of the attempt by DOD to consolidate all pay and O&M accounts into one appropriation per service. Any action by the Pentagon to circumvent Congressional oversight should be resisted.

A4AD asks this committee to continue to provide appropriations against unfunded National Guard and Reserve Equipment Requirements. To appropriate funds to Guard and Reserve equipment would help emphasize to the Active Duty that it is exploring dead-ends by suggesting the transfer of Reserve equipment away from the Reservists.

Unfunded Equipment Requirements

(The services are not listed in priority order.)

Air Force

F/A-22 and F/35 Joint Strike Fighter
Accelerate C-17 and C-130J procurement
Update Tanker Fleet
E-10 multi-sensor Command and Control Aircraft
Space Radar

Air Force Reserve

C-9/C-40 Personnel Sustainment (O&M) Scott AFB—\$40.8 million
 C-130/HC-130 Large Aircraft I/R Counter Measures—\$225.1 million
 A-10 LITENING Advanced Targeting Pod Procurement—\$53.0 million
 C-130 APN-241 Radar—\$37.0 million
 Tactical Data Link for A-10/HH-60—\$7.7 million

Air Guard

Accelerate C-17 Airlifter (8) add (7)—\$180 million each
 Aircraft Rescue and Fire Fighting Vehicles
 E-8C Joint STARS Aircraft Re-engine
 Patient Decontamination Assemblages (20)—\$3.4 million
 Bioenvironmental Assemblages (10)—\$1.0 million

Army

The Army spent \$62.4 billion on O&M in fiscal year 2004, is estimating O&M spending of \$45.4 billion in fiscal year 2005, and is requesting only \$31.8 billion in fiscal year 2006. If these figures are accurate, then Army O&M spending has declined by roughly 50 percent in the space of 2 years for a military that's the same size and actively engaged in combat operations in Iraq, Afghanistan, and other regions of the world.

Army Reserve

Light Medium Tactical Vehicles [LMTV] (600)—\$92 million
 Medium Tactical Vehicles [MTV] (800)—\$146 million
 Multi-Band Super High Frequency Terminal (10)—\$30 million
 Truck, Cargo PLS 10×10 and PLS Trailer (44/88)—\$12.7/\$4.8 million
 High Mobility Multi-Purpose Wheeled Vehicle (279)—\$21 million

Army Guard

Funding for Rapid Field Initiative, special equipment and protective garments. RFI is a kit of approximately 50 essential items that provide the most up-to-date equipment to Soldiers at war.

High Mobility Multi-Purpose Wheeled Vehicle (HMMWV, short 13,265)
 Single Channel Ground Air Radio Sys. (SINCGARS, retire obsolete 20,000 VRC-12)
 Night Vision Goggles (NVG, short 100,000)

Marine Corps

Mountain and Cold Weather Clothing Equipment—\$24.9 million
 Modernization of Medical Allowance Lists—\$19 million
 Shelters and Tents—\$23.4 million
 Portable Tent Lighting—\$8.5 million
 Tactical Radios (PRC-117 and 150)—\$25 million

Reserve Marine Corps

Initial Issue equipment—\$10 million
 Mountain and Cold Weather Clothing Equipment—\$8.4 million
 Portable Tent Lighting—\$3.5 million
 Shelters and Tents—\$5.2 million
 Light Armored Vehicles (LAV -25, 48)—\$104 million

Navy

Aircraft Survivability Equipment—(5) MH-53E, (18) H/MH-60, (37) P-3 AIP—\$22.1 million
 Low Band Transmitter (Jammer) pods (11)—\$16.4 million
 SH-60B/H Armed Helo Kits (28)—\$58.3 million
 Expand Maritime Interdiction Outfitting—personal protection, secure comms & cargo access —\$10.5 million
 Accelerate repair/replace theater small arms—\$24.0 million

Naval Reserve

C-40 A Inter-theater Transport (2)—\$135 million
 Littoral Surveillance System, LSS coastal defense (1)—\$19 million
 Explosive Ordnance Disposal/Naval Coastal Warfare Tactical Vehicles and Support Equipment —\$14.5 million
 EOD/NWC Small Arms—\$36.8 million
 Funds for activation—Funds associated for Reservist mobilize for GWOT

CONCLUSION

A core of military and veteran associations is looking beyond personnel issues to the broader issues of National Defense. As a group, we will continue to meet in the future, and hope to provide your committee with our inputs.

Cuts in manpower and force structure, simultaneously in the Active and Reserve Component are concerns in that it can have a detrimental effect on surge and operational capability.

This testimony is an overview, and expanded data on information within this document can be provided upon request.

Thank you for your ongoing support of the Nation, the Armed Services, and the fine young men and women who defend our country. Please contact us with any questions.

Senator STEVENS. We do not have any questions. He is right, of course, and the difficulty is we still have to find a way to build them that way to start with. The up-armoring is costing us too much money. We have to go back sometimes two or three times to get it right.

We appreciate your testimony, though. We will continue to work with you on that.

Captain HANSON. Thank you, sir.

Senator STEVENS. The next witness is Dr. Jennifer Vendemia of the American Psychological Association.

STATEMENT OF JENNIFER VENDEMIA, Ph.D., ON BEHALF OF THE AMERICAN PSYCHOLOGICAL ASSOCIATION

Dr. VENDEMIA. Thank you, Mr. Chairman. I am Dr. Jennifer Vendemia from the University of South Carolina Psychology Department and I am testifying today on behalf of the American Psychological Association (APA), a scientific and professional organization of more than 150,000 psychologists and affiliates.

Although I am sure you are aware of the large number of psychologists providing clinical services to our military members here and abroad, you may be less familiar with the extraordinary range of research conducted by psychological scientists within the Department of Defense. Our behavioral researchers work on issues critical to national defense with support from the Army Research Institute and Army Research Laboratory, the Office of Naval Research, the Air Force Research Laboratory, and additional smaller human systems research programs in the Office of the Secretary of Defense, Defense Advanced Research Projects Agency (DARPA), the Marine Corps, and the Special Operations Command.

For example, my own brain imaging research, which received generous funding through this committee in fiscal year 2005, seeks to model the neurocognitive processes of lying in order to formulate new deception detection techniques using measures of specific brain activity. As a university researcher, I also collaborate with scientists conducting credibility assessment studies at the nearby DOD Polygraph Institute at Fort Jackson and the DOD Counterintelligence Field Activity here in Washington. Deception and its accurate detection is of course at the heart of counterintelligence work and the research collaborations with DOD are designed to bridge results from my investigations in basic psychophysiology to the more applied mission-specific science and technology work that supports counterintelligence activities. APA encourages the subcommittee to increase funding for these very small but critical research programs.

In terms of the overall defense science and technology (S&T) account, the administration requested less in fiscal year 2005 than the enacted fiscal year 2004 amount and congressional appropriators in turn provided a significant increase over both the budget request and the fiscal year 2004 level, for a total of \$13.33 billion. For fiscal year 2006, the President's budget request of \$10.52 billion for DOD S&T has again fallen short of both the fiscal year 2005 budget request and the fiscal year 2005 enacted level, representing a 21 percent decrease.

As a member of the Coalition for National Security Research, APA recommends the DOD science and technology program be funded at a level of at least 3 percent of total DOD spending in fiscal year 2006 in order to maintain global superiority in an ever-changing national security environment.

Total spending on behavioral and cognitive research, in other words human-centered research, within DOD has declined again in the President's fiscal year 2006 budget. Specific human factors and manpower-personnel-training programs were cut in the Army. The Navy's applied programs in human systems and warfighter sustainment took substantial hits. Support for the Air Force's applied human effectiveness, crew systems, and personnel protection accounts were down in the President's budget request.

We urge you to support the men and women on the front lines by reversing another round of dramatic detrimental cuts to the human-oriented research within the military laboratories and by increasing support to behavioral research programs within DOD activities related to credibility assessment and counterintelligence.

Thank you very much.

Senator STEVENS. Thank you very much.

[The statement follows:]

PREPARED STATEMENT OF JENNIFER VENDEMIA

"Conflict is, and will remain, essentially a human activity in which man's virtues of judgment, discipline and courage—the moral component of fighting power—will endure . . . It is difficult to imagine military operations that will not ultimately be determined through physical control of people, resources and terrain—by people . . . Implicit, is the enduring need for well-trained, well-equipped and adequately rewarded soldiers. New technologies will, however, pose significant challenges to the art of soldiering: they will increase the soldier's influence in the battlespace over far greater ranges, and herald radical changes in the conduct, structures, capability and ways of command. Information and communication technologies will increase his tempo and velocity of operation by enhancing support to his decision-making cycle. Systems should be designed to enable the soldier to cope with the considerable stress of continuous, 24-hour, high-tempo operations, facilitated by multi-spectral, all-weather sensors. However, technology will not substitute human intent or the decision of the commander. There will be a need to harness information-age technologies, such that data does not overcome wisdom in the battlespace, and that real leadership—that which makes men fight—will be amplified by new technology. Essential will be the need to adapt the selection, development and training of leaders and soldiers to ensure that they possess new skills and aptitudes to face these challenges."—NATO RTO-TR-8, Land Operations in the Year 2020.

Mr. Chairman and members of the subcommittee, I'm Dr. Jennifer Vendemia from the University of South Carolina Psychology Department. I am submitting testimony on behalf of the American Psychological Association (APA), a scientific and professional organization of more than 150,000 psychologists and affiliates.

Although I am sure you are aware of the large number of psychologists providing clinical services to our military members here and abroad, you may be less familiar with the extraordinary range of research conducted by psychological scientists with-

in the Department of Defense (DOD). Our behavioral researchers work on issues critical to national defense, with support from the Army Research Institute (ARI) and Army Research Laboratory (ARL); the Office of Naval Research (ONR); the Air Force Research Laboratory (AFRL), and additional, smaller human systems research programs in the Office of the Secretary of Defense, the Defense Advanced Research Projects Agency (DARPA), the Marine Corps, and the Special Operations Command.

For example, my own brain imaging research, which received generous funding through this committee in fiscal year 2005, seeks to model the neurocognitive processes of lying in order to formulate new deception detection techniques using measures of specific brain activity. As a university researcher, I also collaborate with scientists conducting credibility assessment studies at the nearby DOD Polygraph Institute (DODPI) at Fort Jackson and the DOD Counterintelligence Field Activity (CIFA) here in Washington. Deception, and its detection, is of course at the heart of counterintelligence work, and the research collaborations with DOD are designed to bridge results from my investigations in basic psychophysiology to the more applied, mission-specific science and technology work that supports counterintelligence activities.

I would like to address the fiscal year 2006 human-centered research budgets for the military laboratories and programs within the context of the larger DOD Science and Technology budget.

DOD SCIENCE AND TECHNOLOGY BUDGET

The President's budget request for basic and applied research at DOD in fiscal year 2006 is \$10.52 billion, a 21 percent decrease from the enacted fiscal year 2005 level and a decrease from the President's fiscal year 2005 budget request. APA joins the Coalition for National Security Research (CNSR), a group of over 40 scientific associations and universities, in urging the subcommittee to reverse this cut in support and dedicate at least 3 percent of total DOD spending to 6.1, 6.2 and 6.3 level research in fiscal year 2006.

As our Nation rises to meet the challenges of current engagements in Iraq and Afghanistan as well as other asymmetric threats and increased demand for homeland defense and infrastructure protection, enhanced battlespace awareness and warfighter protection are absolutely critical. Our ability to both foresee and immediately adapt to changing security environments will only become more vital over the next several decades. Accordingly, DOD must support basic Science and Technology (S&T) research on both the near-term readiness and modernization needs of the department and on the long-term future needs of the warfighter.

In fiscal year 2005, the administration requested \$10.55 billion for defense S&T, less than the enacted amount in fiscal year 2004. Congressional appropriators in turn provided a significant increase over both the budget request and the fiscal year 2004 level, for a total of \$13.33 billion. For fiscal year 2006, the President's budget request of \$10.52 billion for DOD S&T again fell short—of both the fiscal year 2005 budget request and the fiscal year 2005 enacted level (a 21 percent decrease).

Despite substantial appreciation for the importance of DOD S&T programs on Capitol Hill, and within independent defense science organizations such as the Defense Science Board (DSB), total research within DOD has remained essentially flat in constant dollars over the last few decades. This poses a very real threat to America's ability to maintain its competitive edge at a time when we can least afford it. APA, CNSR and our colleagues within the science and defense communities recommend funding the DOD Science and Technology Program at a level of at least 3 percent of total DOD spending in fiscal year 2006 in order to maintain global superiority in an ever-changing national security environment.

BEHAVIORAL RESEARCH WITHIN THE MILITARY SERVICE LABS

In August, 2000 the Department of Defense met a congressional mandate to develop a Report to the Senate Appropriations Committee on Behavioral, Cognitive and Social Science Research in the Military. The Senate requested this evaluation due to concern over the continuing erosion of DOD's support for research on individual and group performance, leadership, communication, human-machine interfaces, and decision-making. In responding to the committee's request, the Department found that "the requirements for maintaining strong DOD support for behavioral, cognitive and social science research capability are compelling" and that "this area of military research has historically been extremely productive" with "particularly high" return on investment and "high operational impact."

Despite the critical need for strong research in this area, the administration has proposed an fiscal year 2006 defense budget that again would slash funding for

human-centered research. APA urges the committee to, at a minimum, restore proposed fiscal year 2006 cuts to the military lab behavioral research programs.

Within DOD, the majority of behavioral, cognitive and social science is funded through the Army Research Institute (ARI) and Army Research Laboratory (ARL); the Office of Naval Research (ONR); and the Air Force Research Laboratory (AFRL). These military service laboratories provide a stable, mission-oriented focus for science, conducting and sponsoring basic (6.1), applied/exploratory development (6.2) and advanced development (6.3) research. These three levels of research are roughly parallel to the military's need to win a current war (through products in advanced development) while concurrently preparing for the next war (with technology "in the works") and the war after next (by taking advantage of ideas emerging from basic research). All of the services fund human-related research in the broad categories of personnel, training and leader development; warfighter protection, sustainment and physical performance; and system interfaces and cognitive processing.

Despite substantial appreciation for the critical role played by behavioral, cognitive and social science in national security, however, total spending on this research declined again in the President's fiscal year 2006 budget. Specific human factors and manpower/personnel/training programs within the applied 6.2 and 6.3 accounts were cut in the Army, and the Navy's applied 6.2 programs in human systems and warfighter sustainment took substantial cuts. Similarly, support for the Air Force's applied 6.2 and 6.3 level human effectiveness and crew systems and personnel protection accounts were down in the President's budget request.

In addition, I know first-hand the value of supporting the smaller, but mission-critical, behavioral research programs within DOD, particularly those related to credibility assessment and detection of deception. APA encourages the committee to increase funding for these programs.

Behavioral and cognitive research programs eliminated from the mission labs due to cuts or flat funding are extremely unlikely to be picked up by industry, which focuses on short-term, profit-driven product development. Once the expertise is gone, there is absolutely no way to "catch up" when defense mission needs for critical human-oriented research develop. As DOD noted in its own Report to the Senate Appropriations Committee:

"Military knowledge needs are not sufficiently like the needs of the private sector that retooling behavioral, cognitive and social science research carried out for other purposes can be expected to substitute for service-supported research, development, testing, and evaluation . . . our choice, therefore, is between paying for it ourselves and not having it."

The following are brief descriptions of important behavioral research funded by the military research laboratories:

ARMY RESEARCH INSTITUTE FOR THE BEHAVIORAL AND SOCIAL SCIENCES (ARI) AND
ARMY RESEARCH LABORATORY (ARL)

ARI works to build the ultimate smart weapon: the American soldier. ARI was established to conduct personnel and behavioral research on such topics as minority and general recruitment; personnel testing and evaluation; training and retraining; and attrition. ARI is the focal point and principal source of expertise for all the military services in leadership research, an area especially critical to the success of the military as future war-fighting and peace-keeping missions demand more rapid adaptation to changing conditions, more skill diversity in units, increased information-processing from multiple sources, and increased interaction with semi-autonomous systems. Behavioral scientists within ARI are working to help the armed forces better identify, nurture and train leaders. One effort underway is designed to help the Army identify those soldiers who will be most successful meeting 21st century non-commissioned officer job demands, thus strengthening the backbone of the service—the NCO corps.

Another line of research at ARI focuses on optimizing cognitive readiness under combat conditions, by developing methods to predict and mitigate the effects of stressors (such as information load and uncertainty, workload, social isolation, fatigue, and danger) on performance. As the Army moves towards its goal of becoming the Objective Force (or the Army of the future: lighter, faster and more mobile), psychological researchers will play a vital role in helping maximize soldier performance through an understanding of cognitive, perceptual and social factors.

ARL's Human Research & Engineering Directorate sponsors basic and applied research in the area of human factors, with the goal of optimizing soldiers' interactions with Army systems. Specific behavioral research projects focus on the devel-

opment of intelligent decision aids, control/display/workstation design, simulation and human modeling, and human control of automated systems.

Office of Naval Research (ONR)

The Cognitive and Neural Sciences Division (CNS) of ONR supports research to increase the understanding of complex cognitive skills in humans; aid in the development and improvement of machine vision; improve human factors engineering in new technologies; and advance the design of robotics systems. An example of CNS-supported research is the division's long-term investment in artificial intelligence research. This research has led to many useful products, including software that enables the use of "embedded training." Many of the Navy's operational tasks, such as recognizing and responding to threats, require complex interactions with sophisticated, computer-based systems. Embedded training allows shipboard personnel to develop and refine critical skills by practicing simulated exercises on their own workstations. Once developed, embedded training software can be loaded onto specified computer systems and delivered wherever and however it is needed.

Air Force Research Laboratory (AFRL)

Within AFRL, Air Force Office of Scientific Research (AFOSR) behavioral scientists are responsible for basic research on manpower, personnel, training and crew technology. The AFRL Human Effectiveness Directorate is responsible for more applied research relevant to an enormous number of acknowledged Air Force mission needs ranging from weapons design, to improvements in simulator technology, to improving crew survivability in combat, to faster, more powerful and less expensive training regimens.

As a result of previous cuts to the Air Force behavioral research budget, the world's premier organization devoted to personnel selection and classification (formerly housed at Brooks Air Force Base) no longer exists. This has a direct, negative impact on the Air Force's and other services' ability to efficiently identify and assign personnel (especially pilots). Similarly, reductions in support for applied research in human factors have resulted in an inability to fully enhance human factors modeling capabilities, which are essential for determining human-system requirements early in system concept development, when the most impact can be made in terms of manpower and cost savings. For example, although engineers know how to build cockpit display systems and night goggles so that they are structurally sound, psychologists know how to design them so that people can use them safely and effectively.

SUMMARY

On behalf of APA, I would like to express my appreciation for this opportunity to present testimony before the subcommittee. Clearly, psychological scientists address a broad range of important issues and problems vital to our national security, with expertise in understanding and optimizing cognitive functioning, perceptual awareness, complex decision-making, stress resilience, and human-systems interactions. We urge you to support the men and women on the front lines by reversing another round of dramatic, detrimental cuts to the human-oriented research within the military laboratories, and by increasing support to behavioral research programs within DOD activities related to credibility assessment and counterintelligence.

Below is suggested appropriations report language which would encourage the Department of Defense to fully fund its behavioral research programs within the military laboratories:

"DEPARTMENT OF DEFENSE

"RESEARCH, DEVELOPMENT, TEST, AND EVALUATION

*"Behavioral Research in the Military Service Laboratories.—*The Committee notes the increased demands on our military personnel, including high operational tempo, leadership and training challenges, new and ever-changing stresses on decision-making and cognitive readiness, and complex human-technology interactions. To help address these issues vital to our national security, the Committee has provided increased funding to reverse cuts to basic and applied psychological research through the military research laboratories: the Air Force Office of Scientific Research and Air Force Research Laboratory; the Army Research Institute and Army Research Laboratory; and the Office of Naval Research."

Senator STEVENS. Our next witness I hate to leave sitting here, Dr. Polly. I will be right back. There is a vote. If you look back and

see all those lights, that means that we are in the last part of the vote.

Our next witness is Dr. David Polly, Professor and Chief of Spine Surgery at the University of Maryland, formerly of Walter Reed Hospital, an eminent surgeon who made it possible for me to walk straight up again.

STATEMENT OF DAVID W. POLLY, JR., M.D., PROFESSOR OF ORTHOPAEDIC SURGERY AND CHIEF OF SPINE SURGERY, UNIVERSITY OF MINNESOTA, ON BEHALF OF THE AMERICAN ASSOCIATION OF ORTHOPAEDIC SURGEONS

Dr. POLLY. Thank you, sir.

Senator STEVENS. Thank you very much.

Dr. POLLY. Mr. Chairman and Senator Inouye: I thank you for this opportunity to testify today. I am Dr. David Polly, Professor of Orthopaedic Surgery at the University of Minnesota, and I speak on behalf of the American Academy of Orthopaedic Surgeons.

I have personally cared for injured soldiers at Walter Reed during four different military conflicts and have been deployed to a war zone as an orthopaedic surgeon in the military. My last assignment was as Chair of the Department of Orthopaedic Surgery and Rehab at Walter Reed.

I speak today in support of the proposal to establish an Orthopaedic Extremity Trauma Research Program at the U.S. Army Institute of Surgical Research (ISR) at Fort Sam Houston, Texas, to fund intramural and extramural orthopaedic trauma research. It is no surprise that approximately 70 percent of all the trauma out of Afghanistan and Iraq is extremity trauma and it is orthopaedic-related—upper extremity, lower extremity, as well as spine trauma. Body armor has done a remarkable job of protecting the soldier's torso, but his or her extremities are very vulnerable to attacks, especially with IEDs. Wounded soldiers who may have died in previous conflicts from their injuries are now surviving and have to recover from these devastating injuries.

There are remarkable examples of injured soldiers overcoming all odds and returning to full function and even Active duty, including the recent return of Captain David Rozelle to duty in Iraq as the first amputee returning to a combat zone in this conflict.

The American Academy of Orthopaedic Surgeons has worked closely with top military orthopaedic surgeons at war class facilities, including the Institute for Surgical Research, Brooke Army Medical Center, and Walter Reed, to identify gaps in orthopaedic trauma research, specifically the need for improved anti-microbial bone replacement, systems for rapid wound irrigation, cleaning and debridement, laboratory investigations of pathogenesis and treatment of persistent infections in orthopaedic trauma, and surgical and pharmacologic methods to treat direct multiple trauma.

To ensure that sufficient research is being supported on orthopaedic musculoskeletal trauma, it is critical that a dedicated program be created within the DOD. Thus the establishment of this orthopaedic trauma research program at ISR.

It is important to note that military orthopaedic surgeons, in addition to personnel at the U.S. Army Medical Research and Materiel Command at Fort Detrick, have had significant input into the creation of this proposal and fully support its goals.

I commend Congress for its commitment to the amputee care funding, especially the establishment of the Amputee Center at Walter Reed, which is near and dear to my heart. Thank you, sir. But another goal must be to do everything possible to salvage wounded limbs in the first place so that a soldier ideally does not need the Amputee Care Center at all. An expanded Federal commitment to orthopaedic extremity trauma would move us closer to this goal.

National Institutes of Health (NIH) funding is directed at problems facing the U.S. population as a whole. This type of war extremity trauma is unique to DOD and not highly prioritized within the NIH. With over 70 percent of military trauma being orthopaedic-related, orthopaedic extremity trauma research clearly would be of great benefits to the sons and daughters of America serving in the global war on terror and in future conflicts.

On behalf of America's soldiers, military orthopaedic surgeons in every branch of the service, and the American Academy of Orthopaedic Surgeons, I respectfully request that this subcommittee establish and fund the Orthopaedic Trauma Research Program to be administered at the U.S. Army Institute of Surgical Research.

Thank you for this opportunity.
[The statement follows:]

PREPARED STATEMENT OF DAVID W. POLLY, JR.

Chairman Stevens, Ranking Member Inouye, Members of the Senate Defense Appropriations Subcommittee, thank you for the opportunity to testify today. My name is David W. Polly, Jr., MD., and I speak today on behalf of the American Academy of Orthopaedic Surgeons, of which I am an active member, as well as on behalf of military and civilian orthopaedic surgeons involved in orthopaedic trauma research and care.

I am a graduate of the United States Military Academy at West Point and was an airborne ranger serving as a line officer in the Army. Subsequently, I attended medical school at the Uniformed Services University of the Health Sciences and trained in orthopaedic surgery at Walter Reed Army Medical Center. I have personally cared for injured soldiers at Walter Reed during four different military conflicts and have been deployed to a war zone as a military orthopaedic surgeon. My last assignment was as Chair of the Department of Orthopaedic Surgery and Rehabilitation at Walter Reed. I retired at the end of 2003 after 24½ years of service. I am currently Professor of Orthopaedic Surgery and Chief of Spine Surgery at the University of Minnesota.

I would like to cover several topics today. First, I would like to discuss the common types of orthopaedic trauma seen out of Iraq and Afghanistan. Second, I will comment on the current state of orthopaedic trauma research. Third, I would like to offer a military perspective, as laid out yearly in extensive research priorities documents, of the direction in which orthopaedic research should head in order to better care for soldiers afflicted with orthopaedic trauma. Finally, I would like to encourage subcommittee members to consider favorably a proposal to create a peer-reviewed grant program, administered by the U.S. Army Institute of Surgical Research (USAISR), to fund intramural and extramural orthopaedic trauma research.

ORTHOPAEDIC TRAUMA FROM OPERATION IRAQI FREEDOM (OIF)

The Armed Forces are attempting to recover significantly injured soldiers to return them to full function or by limiting their disabilities to a functional level in the case of the most severe injuries. The ability to provide improved recovery of function moves toward the goal of keeping injured soldiers part of the Army or service team. Moreover, when they do leave the Armed Forces, these rehabilitated soldiers have a greater chance of finding worthwhile occupations outside of the service and continuing to contribute positively to society. The Army believes that it has a duty and obligation to provide the highest level of care and rehabilitation to those men and women who have suffered the most while serving the country.

It probably comes as no surprise that approximately 70 percent of trauma seen out of Iraq and Afghanistan, as well as in previous conflicts, is orthopaedic-related, especially upper and lower extremity and spine. For example, during the USNS Comfort's 6-month deployment, surgeons on board performed 498 orthopaedic-related procedures accounting for almost 85 percent of the total surgical procedures performed. Of the 210 injured soldiers who have returned to Tripler Army Medical Center in Honolulu, 70 percent have had orthopaedic injuries. For the 447th Mobile Forward Surgical Team (FST) stationed in Baghdad, the extent of orthopaedic injuries has been even greater with 89 percent of the injuries requiring orthopaedic stabilization.

While medical and technological advancements, as well as the use of fast-moving Forward Surgical Teams, have dramatically decreased the lethality of war wounds, wounded soldiers who may have died in previous conflicts from their injuries are now surviving and have to learn to recover from devastating injuries. The vast majority of the orthopaedic injuries seen are to the upper and lower extremities. While body armor does a great job of protecting a soldier's torso, his or her extremities are particularly vulnerable during attacks.

Characteristics of Military Orthopaedic Trauma

According to the New England Journal of Medicine, blast injuries are producing an unprecedented number of "mangled extremities"—limbs with severe soft-tissue and bone injuries. These can be devastating, potentially mortal injuries ("Casualties of War—Military Care for the Wounded from Iraq and Afghanistan," NEJM, December 9, 2004).

The trauma seen thus far is usually inflicted from close proximity and is most often a result of blast devices, such as improvised explosive devices (IEDs) and mortars. The result of such trauma is open, complex wounds with severe bone fragmentation. Often there is nerve damage, as well as damage to tendons, muscles, vessels, and soft-tissue. In these types of wounds, infection is often a problem.

Military Versus Civilian Orthopaedic Trauma

While there are similarities between orthopaedic military trauma and the types of orthopaedic trauma seen in civilian settings, there are several major differences that must be noted. First, with orthopaedic military trauma, there are up to five echelons of care, unlike in civilian settings when those injured are most likely to receive the highest level of care immediately. Instead, wounded soldiers get passed from one level of care to the next, with each level of care implementing the most appropriate type of care in order to ensure the best possible outcome. The surgeon in each subsequent level of care must try to recreate what was previously done. In addition, a majority of injured soldiers have to be medevaced to receive care and transportation is often delayed due to weather or combat conditions. It has been our experience that over 65 percent of the trauma is urgent and requires immediate attention.

Second, soldiers wounded are often in fair or poor health, are frequently malnourished, and usually fatigued due to the demanding conditions. This presents many complicating factors when determining the most appropriate care.

Third, the setting in which care is initially provided to wounded soldiers is less than ideal, to say the least, especially in comparison to a sterile hospital setting. The environment, such as that seen in Iraq and Afghanistan, is dusty and hot, leading to concerns about sterilization of the hospital setting. For example, infection from *acinetobacter baumannii*, a ubiquitous organism found in the desert soil of Afghanistan and Iraq, is extremely common. In addition, the surgical environment is under constant threat of attack by insurgents. In fact, a considerable percentage of the care provided by military surgeons is for injured Iraqis, both friendly and hostile. Finally, the surgical team is faced with limited resources that make providing the highest level of care difficult.

While, as I have stated, there are many unique characteristics of orthopaedic military trauma, there is no doubt that research done on orthopaedic military trauma benefits trauma victims in civilian settings. Many of the great advancements in orthopaedic trauma care have been made during times of war, such as the external fixateur, which has been used extensively during the current conflict as well as in civilian care.

THE CURRENT AND FUTURE STATE OF ORTHOPAEDIC TRAUMA RESEARCH

Since the Vietnam War there have been advances in medical science, both on the civilian and the military side. One example is with microvascular surgery, which is when reconstructive procedures are performed to try to save limbs by putting blood vessels back together again, providing definitive wound coverage of severe open

wounds to get vital structures covered, such as bone, nerves, and tendons. This means taking tissue from one part of the body and moving it to another part of the body and sewing in blood vessels with the use of a microscope. This allows the surgeon to wash, clean, debride and cover severe open contaminated wounds with some type of definitive coverage

At the annual meeting of the Advanced Technology Applications for Combat Casualty Care (ATACCC), medical research priorities are laid out for military research facilities and programs. Many of the priorities expand on research that is currently underway at facilities such as the U.S. Army Institute of Surgical Research (USAISR) and Walter Reed Army Medical Center (WRAMC). I would like to provide you details of some of the research that is already underway and the outlook for these medical research advances.

Anti-microbial Bone-replacement Material

High-energy wounds on the battlefield produce contaminated wounds with bone loss. The goal is to develop a product that can be placed into an open fracture after initial debridement at far forward medical treatment units. The product will deliver a time-release dose of antibiotic into the wound as well as promote bone growth. Evaluation of various materials has been conducted in animal models to determine the best product for treating highly contaminated injuries. Future work focuses on accelerating healing in larger defects, as well as evaluation of antimicrobial bone replacement materials in humans.

Improved Long Bone Splint/cast

The current materials employed to splint injured limbs on the battlefield do not provide optimal support of the injured limb and are too bulky to be carried by the medic along with other required medical supplies. The goal is to develop a smaller and lighter weight splint/cast system that can be molded to the injured limb providing adequate structural support. Research is currently underway on a self-contained splint that can be molded to an injured extremity like a fiberglass or plaster splint without the requirement of external water and extra padding that fiberglass and plaster splinting requires.

System for Rapid Wound Irrigation and Cleaning

Decontamination for prevention of infection in open fractures is essential in caring for battlefield extremity injuries. Development of strategies for decontamination in the far forward environment includes pulsatile irrigation with antimicrobial irrigation solutions. The goal is to identify an antimicrobial irrigation solution that produces optimal decontamination of open fractures. Activity against organisms that are unusual in the United States but have been common and problematic in the Iraq and Afghanistan conflicts are being considered. Characteristics of the contaminated wound, such as bacterial biofilm formation and its effect on the ability to decontaminate, are also being explored. Research is currently being conducted in an animal model.

Temporary Skin Substitute

Prevention of contamination of open wounds after battlefield injury would prevent infection in minor to moderate wounds. The focus is on the development of a rapid set polymer that can be applied to a wound after cleaning.

System of Assessing Wound Tissue Viability and Cleaning

Determination of adequate debridement to remove contaminated and dead tissue is essential in the treatment of battlefield injuries. Research in this area to produce a hand held, portable device that can provide a real time assessment of tissue viability as an adjunct to surgical debridement is ongoing.

Measuring Physical and Psychological Outcomes for Survivors of Severe Penetrating Upper Extremity Injury Sustained on the Battlefield in Iraq and Afghanistan

A proposal to study the functional outcomes of U.S. casualties following major limb injury is being finalized by the U.S. Army Institute of Surgical Research. This study will help to determine the effect of these injuries as well as to identify areas for research in the future. The initial look will be a pilot study of the casualties from the conflicts. The ultimate goal is to establish a project to study these casualties prospectively throughout their treatment course.

Joint Theater Trauma Registry (JTTR)

The U.S. Army Institute of Surgical Research has developed this registry modeled after trauma registries mandated by the American College of Surgeons at U.S. trauma centers. This registry provides demographic and injury data on U.S. casualties

in Afghanistan and Iraq. It will be very useful in determining outcomes from major limb battlefield injury.

There are also many exciting proposals for orthopaedic trauma research that have not been explored, such as:

- Laboratory investigations on the pathogenesis and treatment of persistent infections in orthopaedic trauma.
- Those injured in Iraq are suffering from a significant rate of wound infection, despite standard of care treatment. *Acinetobacter*, a bacterium, has been identified as a frequent cause of these infections, and research is needed into the pathogenesis of this organism in traumatic wounds, and evaluation of novel treatments.
- Surgical and pharmacologic methods for the treatment of direct muscle trauma.

STORIES FROM THE FRONTLINES

There have been many heroic stories of injured soldiers struggling to regain function and to return to normal life, or even back to service. I am sure you heard about Captain David Rozelle, a Commander in the 3rd Armored Cavalry Regiment, who was the first OIF amputee to return to active duty back in March 2005 less than 2 years after having his right foot blown off by a landmine. In an interview with the National Review Online (2/14/05), when asked why he wanted to return to duty, Capt. Rozelle responded, "I am smarter, stronger, and more ready to help create freedom for the Iraqi people." Before returning to Iraq, Capt. Rozelle even completed the New York City Marathon. His heroic attitude, coupled with the superior care he received following his injuries, made Capt. Rozelle's return to service possible.

Another story was recently highlighted in a March 2005 National Public Radio (NPR) series titled "Caring for the Wounded: The Story of Two Marines." The story followed two Marines injured in Iraq: 1st Sgt. Brad Kasal and Lance Cpl. Alex Nicoll. Lance Cpl. Nicoll had to have his left leg amputated as a result of his injuries from gunshot wounds. While Nicoll continues to undergo physical therapy at Walter Reed to get used to his new prosthetic leg, made from graphite and titanium, his doctors, therapists, and he are confident that he will return to full function. In fact, shortly after the NPR series ran, Nicoll visited New Hampshire for a snowboarding vacation.

While Sgt. Kasal's was so seriously injured that he lost 4 inches of bone in his right leg, due to medical advances in limb salvaging, Sgt. Kasal did not have to have his leg amputated. Kasal is currently undergoing a bone growth procedure, called the Ilizarov Technique, which grows the bone 1 millimeter a day. In about 4 months, it is likely that Kasal will be able to walk on both of his own legs. These stories clearly illustrate the benefits of orthopaedic trauma research to America's soldiers.

ORTHOPAEDIC TRAUMA RESEARCH PROGRAM

The American Academy of Orthopaedic Surgeons (AAOS) and military and civilian orthopaedic surgeons and researchers are grateful that the committee included language in the fiscal year 2005 Defense Appropriations Bill to make "orthopaedic extremity trauma research" a priority research topic within the Peer Reviewed Medical Research Program. From all indications, the number of grants submitted under this topic has been incredibly high compared to other research priorities listed in previous years. Clearly, there is both a need and a demand for funding for orthopaedic trauma research.

With orthopaedic trauma being the most common form of trauma seen in military conflicts, it is crucial that there be funding dedicated specifically to the advancement of related trauma research. The American Academy of Orthopaedic Surgeons (AAOS) has worked closely with the top military orthopaedic surgeons, at world-class facilities such as the U.S. Army Institute of Surgical Research, Fort Sam Houston, TX, Brooke Army Medical Center, and Walter Reed Army Medical Center, to identify gaps in orthopaedic trauma research and care, such as the need for improved anti-microbial bone-replacement material; systems for rapid wound irrigation, cleaning and debridement; laboratory investigations on the pathogenesis and treatment of persistent infections in orthopaedic trauma; and surgical and pharmacologic methods for the treatment of direct muscle trauma.

The result of these discussions has been a proposal to create an Orthopaedic Trauma Research Program, administered by the U.S. Army Institute of Surgical Research (USAISR) at Fort Sam Houston, Texas, to fund peer-reviewed intramural and extramural orthopaedic trauma research. The USAISR is the only Department of Defense Research laboratory devoted solely to improving combat casualty care. Having the program administered by the USAISR will ensure that the research

funding follows closely the research priorities laid out by the Army and the Armed Forces, will be of the most benefit to injured soldiers, and will better ensure collaboration between military and civilian research facilities. USAISR has extensive experience administering similar grant programs.

It is important to note that military orthopaedic surgeons, in addition to personnel at the U.S. Army Medical Research and Materiel Command, Fort Detrick, have had significant input into the creation of this proposal and fully support its goals.

CONCLUSION

I hope that I have given you a well-rounded perspective on the extent of what orthopaedic trauma military surgeons are seeing and a glimpse into the current and future research for such trauma. Military trauma research currently being carried out at military facilities, such as WRAMC and the USAISR, and at civilian medical facilities, is vital to the health of our soldiers. The USAISR takes a leadership role in the administration of funding for peer-reviewed intramural and extramural orthopaedic trauma research. The research carried out at these facilities is vital to the Armed Forces' objective to return injured soldiers to full function in hopes that they can continue to be contributing soldiers and active members of society.

Mr. Chairman, the American Academy of Orthopaedic Surgeons, as well as the entire orthopaedic community, stands ready to work with this subcommittee to identify and prioritize research opportunities for the advancement of orthopaedic trauma care. Military and civilian orthopaedic surgeons and researchers are committed to advancing orthopaedic trauma research that will benefit the unfortunately high number of soldiers afflicted with such trauma and return them to full function. It is imperative that the Federal Government, when establishing its defense health research priorities in the fiscal year 2006 Defense Appropriations bill, ensure that orthopaedic trauma research is a top priority.

I urge you to establish the Orthopaedic Trauma Research Program at a funding level of \$25 million. While Congress funds an extensive array of medical research through the Department of Defense, with over 70 percent of military trauma being orthopaedic-related, no other type of medical research would better benefit our men and women serving in the War on Terror and in future conflicts.

Senator STEVENS. Well, thank you very much, Dr. Polly. Every time we go out to Walter Reed or Bethesda to visit the wounded people, I am convinced in this war we are having fewer deaths, but more severe injuries.

Dr. POLLY. Yes, sir.

Senator STEVENS. Those too are going to require a considerable amount of research. As I said before, I do not know anyone that could match your ability in that.

For the information of the audience, I had two back operations. After each one I went back to the same condition of not being able to stand up straight. Dr. Polly theorized that there was something in the spine rather than in the disks and he pursued his theory to my success. I run, I play tennis, I lift weights and I swim because of your skill and research, doctor. So we will follow you anywhere.

Dr. POLLY. Thank you, sir.

Senator STEVENS. Thank you very much.

Senator INOUE. Will you check me out?

Dr. POLLY. Yes, sir. Right now?

Senator INOUE. May I ask a question.

Dr. POLLY. Yes, Senator.

Senator INOUE. A few days ago the base realignment and closure (BRAC) decisions were announced. Will that have any impact on your program?

Dr. POLLY. Sir, it is a needed realignment. There is some overt redundancy between Bethesda and Walter Reed and there are opportunities from the combination. The challenge is how to do it right. I think if you keep the spirit alive—I know that you spoke

in 1988 at a dining-in at Walter Reed that I attended and you inspired each and every one of us, and we will be terribly sorry to lose the legacy of that institution and the 100 years of service and the many, many, many great Americans who have gone through there and received their care.

But I think we need to move forward and to the future. One of the challenges at Walter Reed is simply parking and that people cannot get on and off the campus there and they do not have good public transportation. Bethesda is a better solution.

While as a West Point graduate I admit a bias toward the Army, I recognize the overriding need for the good of DOD and the concept of the Walter Reed National Military Medical Center at Bethesda is a good idea. It should allow us to leverage the benefits of the NIH and build the world-class—continue the world-class facility that it is to provide the best care possible today, tomorrow, and in the future for the sons and daughters of America.

Senator INOUE. Do you have any thoughts on the Uniformed Services University of the Health Sciences (USUHS)?

Dr. POLLY. Yes, sir. I am a graduate of the Uniformed Services University. I went to West Point, I served as a line officer, and then decided I wanted to go to medical school. I interviewed at the University of Virginia and had a deposit down on a place to live there. I went and interviewed at USUHS and was so inspired by J.P. Sanford and the program there that I changed my mind at the last minute and went to school there.

That school is the reason that there was military medical care coordination in Desert Storm, because the USUHS graduates in the Army and the Navy and the Air Force called each other up and said: I am short on fluids; what have you got? Well, I got this and I got that. And there was a lot of horse-trading that went on that coordinated the care because of the network of interconnected people across the DOD.

USUHS now serves as the hub for thinking about military medical care and we need to keep the best and brightest minds either on a consulting basis or a full-time basis there to stimulate the thoughts so that we can do a better job for the next generation of people serving our country.

Senator INOUE. I thank you very much, doctor. You have been most reassuring.

Dr. POLLY. Thank you, sir.

Senator STEVENS. Well said, doctor. We are going to pursue you on that, too.

The next witness is Carolina Hinestrosa, the Executive Vice President for Programs of the National Breast Cancer Coalition.

STATEMENT OF CAROLINA HINESTROSA, EXECUTIVE VICE PRESIDENT OF PROGRAMS AND PLANNING, NATIONAL BREAST CANCER COALITION

Ms. HINESTROSA. Good afternoon. Thank you, Chairman Stevens and ranking member Inouye. Thank you and your subcommittee for your great determination and leadership in helping us secure funding for understanding how to prevent and cure breast cancer through the Department of Defense breast cancer research program.

I am a two-time breast cancer survivor. I am a wife and a mother and, as you know, I am Executive Vice President of the National Breast Cancer Coalition. On behalf of the coalition and the more than 3 million women living with breast cancer, I thank you for the opportunity to speak today.

We are requesting level funding for the breast cancer research program this year. This program is a critical research program that has transformed biomedical research. It has established itself as a model that is admired around the world for its accountability and innovation. This critical program—it is important that this program maintains its structure and integrity. The program fills critical gaps in breast cancer research.

As the Institute of Medicine (IOM) has pointed out in two separate reports, the DOD breast cancer research program fills an unmet need in breast cancer research in this community and is not duplicative of other programs. In both reports the IOM recommends that the program continue. Any changes to the structure of the program could significantly undermine its innovation and its ability to fund cutting edge breast cancer research.

An inherent component of this program has been the inclusion of consumer advocates at every level, which has created an unprecedented working relationship between advocates and scientists and ultimately has led to new avenues of research in breast cancer. Since 1992 over 400 breast cancer survivors have served in the peer review panels for the DOD breast cancer research program and their vital role is key to the success of this model of biomedical research which is imitated around the world.

The program is accountable to the public. Every cent that is spent must be reported at a public meeting held every 2 years, called Era of Hope. The Era of Hope meeting this year is just a few weeks away in Philadelphia, from June 8 through June 11. I hope you all will be able to attend this meeting to see the incredible progress that is being made through this program.

I want to provide you with a couple of examples of research that has been funded through this program and that is making a real difference. You have heard about Timoxicin, a drug that was developed many years ago for a certain type of breast cancer. About 50 percent of women respond to that drug and some others and we do not know—we did not know who was able to respond. Funding by this program has identified two genes that can predict who would respond from this drug Timoxicin, so we will be able to give it to the right people.

But most stunningly, last night I listened to a presentation in Orlando at the American Society for Clinical Oncology where they presented the results of a study of women with earlier breast cancer which was unprecedented. Using a biological monitor and an antibody of a drug, Receptin, they were able to show a 50 percent improvement in survival for women who have a particularly aggressive type of breast cancer.

This funding for this type of research was possible in the early years by the Department of Defense breast cancer research program. It was innovative research and visionary research that was languishing and not being funded anywhere else. The DOD breast cancer research program understood and recognized the potential

impact of this research and funded it in the early years and then the research progressed to women with advanced breast cancer and now with early breast cancer. The results from this research are about a 50 percent improvement in outcomes for these women.

So clearly the vision, the innovation of this program, is paying in a very important way to the American taxpayer.

On behalf of the women with breast cancer and on behalf of our daughters and granddaughters who are counting on us to do the right thing, I thank you for your support and urge level funding for this program.

[The statement follows:]

PREPARED STATEMENT OF CAROLINA HINESTROSA

Thank you, Mr. Chairman and members of the Appropriations Subcommittee on Defense, for the opportunity to speak to you today about a program that, with little Federal investment, goes a long way toward increasing and improving breast cancer research. You and your committee have shown great determination and leadership in searching for the answers by funding the Department of Defense (DOD) Peer-Reviewed Breast Cancer Research Program (BCRP) at a level that has brought us closer to eradicating this disease.

I am Carolina Hinestrosa, a two-time breast cancer survivor, a wife and mother, and Executive Vice President for Programs and Planning of the National Breast Cancer Coalition (NBCC). On behalf of NBCC, and the more than 3 million women living with breast cancer, I would like to thank you again for the opportunity to testify today.

The DOD BCRP's 13 years of progress in the fight against breast cancer has been made possible by the Appropriations Committee's investment in breast cancer research. To continue this unprecedented progress, we ask that you support level funding for this program—a \$150 million appropriation for fiscal year 2006. As an Institute of Medicine (IOM) report concluded last year, there continues to be excellent science that goes unfunded, but for this small program, which is why we believe that the BCRP should be appropriated level funding for fiscal year 2006.

As you know, the National Breast Cancer Coalition is a grassroots advocacy organization made up of more than 600 organizations and tens of thousands of individuals and has been working since 1991 toward the eradication of breast cancer through advocacy and action. NBCC supports increased funding for breast cancer research, increased access to quality health care for all women, and increased influence of breast cancer activists at every table where decisions regarding breast cancer are made.

WHY THE DOD BREAST CANCER RESEARCH PROGRAM NEEDS LEVEL FUNDING IN FISCAL YEAR 2006

In the past 13 years, the DOD Peer-Reviewed Breast Cancer Research Program has established itself as a model medical research program, respected throughout the cancer and broader medical community for its innovative and accountable approach. The groundbreaking research performed through the program has the potential to benefit not just breast cancer, but all cancers, as well as other diseases. Biomedical research is being transformed by the BCRP's success.

This program is both innovative and incredibly streamlined. It continues to be overseen by a group of distinguished scientists and activists, as recommended by the IOM. Because there is no bureaucracy, the program is able to respond quickly to what is currently happening in the scientific community. It is able to fill gaps with little red tape. It is responsive, not just to the scientific community, but also to the public.

This program has matured from an isolated research program to a broad-reaching influential voice forging new and innovative directions for breast cancer research and science. The flexibility of the program has allowed the Army to administer this groundbreaking research effort with unparalleled efficiency and effectiveness.

In addition, an inherent part of this program has been the inclusion of consumer advocates at every level, which has created an unprecedented working relationship between advocates and scientists, and ultimately has led to new avenues of research in breast cancer. Since 1992, nearly 800 breast cancer survivors have served on the BCRP review panels. Their vital role in the success of the BCRP has led to con-

sumer inclusion in other biomedical research programs at DOD. This program now serves as an international model.

THE DOD PEER REVIEWED BCRP PROVIDES UNIQUE FUNDING OPPORTUNITIES

It is important to note that the DOD Integration Panel that designs this program has a plan of how best to spend the funds appropriated. This plan is based on the state of the science—both what scientists know now and the gaps in our knowledge—as well as the needs of the public. This plan coincides with our philosophy that we do not want to restrict scientific freedom, creativity or innovation. While we carefully allocate these resources, we do not want to predetermine the specific research areas to be addressed.

Developments in the past few years have begun to offer breast cancer researchers fascinating insights into the biology of breast cancer and have brought into sharp focus the areas of research that hold promise and will build on the knowledge and investment we have made. The Innovative Developmental and Exploratory Awards (IDEA) grants of the DOD program have been critical in the effort to respond to new discoveries and to encourage and support innovative, risk-taking research. The IDEA grants have been instrumental in the development of promising breast cancer research. These grants have allowed scientists to explore beyond the realm of traditional research and have unleashed incredible new ideas and concepts. IDEA grants are uniquely designed to dramatically advance our knowledge in areas that offer the greatest potential.

IDEA grants are precisely the type of grants that rarely receive funding through more traditional programs such as the National Institutes of Health, and academic research programs. Therefore, they complement, and do not duplicate, other Federal funding programs. This is true of other DOD award mechanisms as well.

For example, the Innovator awards are structured to invest in world renowned, outstanding individuals, rather than projects, from any field of study by providing funding and freedom to pursue highly creative, potentially breakthrough research that could ultimately accelerate the eradication of breast cancer. The Era of Hope Scholar is intended to support the formation of the next generation of leaders in breast cancer research, by identifying the best and brightest independent scientists early in their careers and giving them the necessary resources to pursue a highly innovative vision toward ending breast cancer.

Also, Historically Black Colleges and Minority Universities/Minority Institutions Partnership Awards are intended to provide assistance at an institutional level. The major goal of this award is to support collaboration between multiple investigators at an applicant Minority Institution and a collaborating institution with an established program in breast cancer research, for the purpose of creating an environment that would foster breast cancer research, and in which Minority Institute faculty would receive training toward establishing successful breast cancer research careers.

These are just a few examples of innovative approaches at the DOD BCRP that are filling gaps in breast cancer research. It is vital that these grants are able to continue to support the growing interest in breast cancer research—\$150 million for peer-reviewed research will help sustain the program's momentum.

The DOD BCRP also focuses on moving research from the bench to the bedside. A major feature of the awards offered by the BCRP is that they are designed to fill niches that are not offered by other agencies. The BCRP considers translational research to be the application of well-founded laboratory or other pre-clinical insight into a clinical trial. To enhance this critical area of research, several research opportunities have been offered. Clinical Translational Research Awards have been awarded for investigator-initiated projects that involve a clinical trial within the lifetime of the award. The BCRP expanded its emphasis on translational research by offering five different types of awards that support work at the critical juncture between laboratory research and bedside applications.

The Centers of Excellence awards mechanism brings together the world's most highly qualified individuals and institutions to address a major overarching question in breast cancer research that could make a major contribution towards the eradication of breast cancer. These Centers put to work the expertise of basic, epidemiology and clinical researchers, as well as consumer advocates to focus on a major question in breast cancer research. Many of these centers are working on questions that will translate into direct clinical applications.

SOME OF THE MANY EXAMPLES OF SCIENTIFIC ACHIEVEMENTS BROUGHT ABOUT BY THIS
COMMITTEE'S INVESTMENT IN THE DOD PEER REVIEWED BCRP

The BCRP research portfolio is comprised of many different types of projects, including support for innovative ideas, infrastructure building to facilitate clinical trials, and training breast cancer researchers.

One of the most promising outcomes of research funded by the BCRP was the development of Herceptin, a drug that prolongs the lives of women with a particularly aggressive type of advanced breast cancer. This drug could not have been developed without first researching and understanding the gene known as HER-2/neu, which is involved in the progression of some breast cancers. Researchers found that over-expression of HER-2/neu in breast cancer cells results in very aggressive biologic behavior. Most importantly, the same researchers demonstrated that an antibody directed against HER-2/neu could slow the growth of the cancer cells that over-expressed the gene. This research, which led to the development of the drug Herceptin, was made possible in part by a DOD BCRP-funded infrastructure grant. Other researchers funded by the BCRP are currently working to identify similar kinds of genes that are involved in the initiation and progression of cancer. They hope to develop new drugs like Herceptin that can fight the growth of breast cancer cells.

Another example of success from the program is a study of sentinel lymph nodes (SLNs). This study confirmed that SLNs are indicators of metastatic progression of disease. The resulting knowledge from this study and others has led to a standard of care that includes lymph node biopsies. If the first lymph node is negative for cancer cells, then it is unnecessary to remove all the lymph nodes. This prevents lymphodermatoma, which can be painful and have lasting complications.

Several studies funded by the BCRP will examine the role of estrogen and estrogen signaling in breast cancer. For example, one study examined the effects of the two main pathways that produce estrogen. Estrogen is often processed by one of two pathways; one yields biologically active substances while the other does not. It has been suggested that women who process estrogen via the biologically active pathway may be at higher risk of developing breast cancer. It is anticipated that work from this funding effort will yield insights into the effects of estrogen processing on breast cancer risk in women with and without family histories of breast cancer.

One DOD IDEA award success has supported the development of new technology that may be used to identify changes in DNA. This technology uses a dye to label DNA adducts, compounds that are important because they may play a role in initiating breast cancer. Early results from this technique are promising and may eventually result in a new marker/method to screen breast cancer specimens.

Investigators funded by the DOD have developed a novel imaging technique that combines two-dimensional and three-dimensional digital mammographic images for analysis of breast calcifications. Compared to conventional film screen mammography, this technique has greater resolution. Ultimately, this technique may help reduce the number of unnecessary breast biopsies.

Despite the enormous successes and advancements in breast cancer research made through funding from the DOD BCRP, we still do not know what causes breast cancer, how to prevent it, or how to cure it. It is critical that innovative research through this unique program continues so that we can move forward toward eradicating this disease.

CONGRESS AND TAXPAYERS KNOW HOW THEIR INVESTMENT IS SPENT AND THAT THE
DOD PEER REVIEWED BCRP IS FEDERAL MONEY WELL SPENT

The DOD BCRP is as efficient as it is innovative. In fact, 90 percent of funds go directly to research grants. The flexibility of the program allows the Army to administer it in such a way as to maximize its limited resources. The program is able to quickly respond to current scientific advances, and fulfills an important niche by focusing on research that is traditionally underfunded. This was confirmed and reiterated in an IOM report released last year. It is responsive to the scientific community and to the public. This is evidenced by the inclusion of consumer advocates at both the peer and programmatic review levels. The consumer perspective helps the scientists understand how the research will affect the community, and allows for funding decisions based on the concerns and needs of patients and the medical community.

Since 1992, the BCRP has been responsible for managing \$1.66 billion in appropriations. From its inception through fiscal year 2003, 4,073 awards at 420 institutions throughout the United States and the District of Columbia have been awarded. Approximately 150 awards will be granted for fiscal year 2004. The areas of focus of the DOD BCRP span a broad spectrum and include basic, clinical, behav-

ioral, environmental sciences, and alternative therapy studies, to name a few. The BCRP benefits women and their families by maximizing resources and filling in the gaps in breast cancer research. Scientific achievements that are the direct result of the DOD BCRP grants are undoubtedly moving us closer to eradicating breast cancer.

The outcomes of the BCRP-funded research can be gauged, in part, by the number of publications, abstracts/presentations, and patents/licensures reported by award-ees. To date, there have been more than 6,200 publications in scientific journals, more than 4,200 abstracts and 140 patents/licensure applications. The Federal Government can truly be proud of its investment in the DOD BCRP.

RESEARCHERS, CONSUMERS AND POLICY MAKERS AGREE: THE DOD PEER REVIEWED BCRP SHOULD CONTINUE

The National Breast Cancer Coalition has been the driving force behind this program for many years. The success of the DOD Peer-Reviewed Breast Cancer Research Program has been illustrated by several unique assessments of the program. The IOM, which originally recommended the structure for the program, independently re-examined the program in a report published in 1997. They published another report on the program in 2004. Their findings overwhelmingly encouraged the continuation of the program and offered guidance for program implementation improvements.

The 1997 IOM review of the DOD Peer-Review Breast Cancer Research Program commended the program and stated that, "the program fills a unique niche among public and private funding sources for cancer research. It is not duplicative of other programs and is a promising vehicle for forging new ideas and scientific breakthroughs in the nation's fight against breast cancer." The IOM report recommended continuing the program and established a solid direction for the next phase of the program. The 2004 report reiterated these same statements and indicated that is important for the program to continue. It is imperative that Congress recognizes the independent evaluations of the DOD Breast Cancer Research Program, as well as reiterates its own commitment to the program by appropriating the funding needed to ensure its success.

The DOD Peer-Reviewed Breast Cancer Research Program not only provides a funding mechanism for high-risk, high-return research, but also reports the results of this research to the American people at a biennial public meeting called the Era of Hope. The Era of Hope meeting has set a precedent, it is the first time a federally funded program reported back to the public in detail not only on the funds used, but also on the research undertaken, the knowledge gained from that research and future directions to be pursued. The transparency of the BCRP allows scientists, consumers and the American public to see the exceptional progress made in breast cancer research.

At the 2002 Era of Hope meeting, all BCRP award recipients from fiscal years 1998–2000 were invited to report their research findings, and many awardees from previous years were asked to present advancements in their research. Scientists reported important advances in the study of cancer development at the molecular and cellular level. Researchers presented the results of research that elucidates several genes and proteins responsible for the spread of breast cancer to other parts of the body, and, more importantly, reveals possible ways to stop this growth. The meeting, which marked the 10th anniversary of the program, also featured grant recipients who are working towards more effective and less toxic treatments for breast cancer that target the unique characteristics of cancer cells and have a limited effect on normal cells. The next meeting will be held in June 2005.

The DOD Peer-Reviewed Breast Cancer Research Program has attracted scientists with new ideas and has continued to facilitate new thinking in breast cancer research and research in general. Research that has been funded through the DOD BCRP is available to the public. Individuals can go to the Department of Defense website and look at the abstracts for each proposal at <http://cdmrp.army.mil/bcrp/>.

COMMITMENT OF THE NATIONAL BREAST CANCER COALITION

The National Breast Cancer Coalition is strongly committed to the DOD program in every aspect, as we truly believe it is one of our best chances for finding cures and preventions for breast cancer. The Coalition and its members are dedicated to working with you to ensure the continuation of funding for this program at a level that allows this research to forge ahead.

In May 1997, our members presented a petition with more than 2.6 million signatures to congressional leaders on the steps of the Capitol. The petition called on the

President and the U.S. Congress to spend \$2.6 billion on breast cancer research between 1997 and the year 2000. Funding for the DOD Peer-Reviewed Breast Cancer Research Program was an essential component of reaching the \$2.6 billion goal that so many women and families worked for.

Once again, NBCC is bringing its message to Congress. Just over 1 month from now, many of the women and family members who supported the campaign to gather the 2.6 million signatures will come to NBCCF's Annual Advocacy Training Conference here in Washington, DC. More than 600 breast cancer activists from across the country will join us in continuing to mobilize our efforts to end breast cancer. The overwhelming interest in, and dedication to eradicate this disease continues to be evident as people not only are signing petitions, but are willing to come to Washington, DC from across the country to deliver their message about their commitment.

Since the very beginning of this program in 1992, Congress has stood in support of this important investment in the fight against breast cancer. In the years since, Mr. Chairman, you and this entire committee have been leaders in the effort to continue this innovative investment in breast cancer research.

NBCC asks you, Defense Appropriations Subcommittee, to recognize the importance of what has been initiated by the Appropriations Committee. You have set in motion an innovative and highly efficient approach to fighting the breast cancer epidemic. What you must do now is support this effort by continuing to fund research that will help us win this very real and devastating war against a cruel enemy.

Thank you again for the opportunity to submit testimony and for giving hope to the 3 million women in the United States living with breast cancer.

Senator INOUE [presiding]. Thank you very much. I think you should also thank the members of the United States Senate, because you may notice that this is in a defense account. It should have been in the health account. But as we all know, the health account is lacking in appropriate funds. Therefore, with the permission of the Senate, we have put it in the defense fund.

Ms. HINESTROSA. And I thank you for that.

Senator INOUE. You can be assured that will continue.

Ms. HINESTROSA. Thank you very much.

Senator INOUE. Thank you.

Our next witness is the Director of the Osteoporosis Research Center on behalf of the National Coalition for Osteoporosis and Related Bone Diseases, Dr. Robert Recker. Doctor.

STATEMENT OF ROBERT RECKER, M.D., DIRECTOR, OSTEOPOROSIS RESEARCH CENTER, ON BEHALF OF THE NATIONAL COALITION FOR OSTEOPOROSIS AND RELATED BONE DISEASES

Dr. RECKER. Mr. Chairman, I am Robert Recker, Director of the Osteoporosis Center at Creighton University in Omaha, Nebraska. I am testifying on behalf of the National Coalition for Osteoporosis and Related Bone Diseases. We appreciate the opportunity to discuss the necessity for continued support and funding of the bone health and military medical readiness research program within the Department of Defense.

This research program addresses the problem of stress fractures. These fractures are the most serious overuse injuries that are the result of repeated stresses that occur in vigorous training and not from a single traumatic event. Stress fracture injury has a marked impact on the health and force readiness of military personnel, imposing significant costs in medical care, extended training time, attrition of personnel, and ultimately military readiness.

It is one of the most common and disabling overuse injuries seen in military recruits today, particularly in women. Approximately 50 percent of all women and 30 percent of all men sustain an overuse injury in basic training, and the majority of soldiers pulled from

training for rehabilitation suffer from stress fractures. Worse, 40 percent of the men and 60 percent of the women pulled from training due to stress fracture do not return and are retired from the military and discharged. Those who do return require 80 to 120 days of rehabilitation.

At Fort Jackson alone, an estimated \$26 million was spent in one year on training 749 soldiers later discharged due to stress fracture. Our own archive from our experience and research at Fort Leonard Wood shows that extent of these fractures that range from pelvic fractures to upper hip fractures, mid-leg fractures, lower limb fractures, foot fractures. Some of them are disabling for life.

The bone health and military medical readiness research program has provided some practical solutions to help protect, sustain, and enhance the performance of military personnel. Research with human and animal models has revealed the following. The length of stride for women is related to fracture. Genetics plays a role in bone marrowization and structural processes of bone that influence strength. Calorie restriction and calcium deficiency result in decreased structural properties of bone and contribute to decreased bone strength. Oral contraceptive use contributes to reduced bone mass, which increases fracture risk. Chronic alcohol consumption inhibits bone formation.

We at Creighton, collaborating with military scientists, have demonstrated that heel ultrasound measurement and assessment of risk factors, such as physical fitness, smoking, use of injectable contraceptives, performed at the onset of basic training predict risk of stress fractures. As a result of such research, technologies such as positron emission tomography, acoustic emission, are being developed for higher imaging and better identification of stress fractures. Modifications have been made to the U.S. Army physical fitness training program to reduce fractures while hopefully not decreasing the overall fitness of military recruits at the end of basic training.

Studies are ongoing to determine whether Vitamin D or calcium supplementation decreases the incidence of stress fractures in new recruits. Additional research is needed. We need better approaches to identify and improve bone health in recruits, interventions to reduce stress fracture during strenuous physical training and deployment, and acceleration of stress fracture healing and return to full status.

Mr. Chairman, in summary, stress fractures continue to occur, significantly impair military readiness, and delay the time to battlefield deployment. It is imperative that the Department of Defense build on recent findings and maintain an aggressive and sustained bone health research program at a level of \$6 million in fiscal year 2006.

Thank you very much.
[The statement follows:]

PREPARED STATEMENT OF JOAN GOLDBERG, EXECUTIVE DIRECTOR, AMERICAN SOCIETY FOR BONE AND MINERAL RESEARCH

Mr. Chairman and members of the committee, I am Joan Goldberg, Executive Director of the American Society for Bone and Mineral Research and I am testifying on behalf of the National Coalition for Osteoporosis and Related Bone Diseases. The members of the Bone Coalition are the American Society for Bone and Mineral Re-

search, the National Osteoporosis Foundation, the Paget Foundation for Paget's Disease of Bone and Related Disorders, and the Osteogenesis Imperfecta Foundation. We appreciate this opportunity to discuss with you the necessity for continued support and funding of the Bone Health and Military Medical Readiness Research Program within the Department of Defense (DOD).

The Bone Health and Military Medical Readiness Research Program addresses a critical obstacle to military readiness and a major cause of low soldier retention during basic training and thereafter. This program supports research to improve our understanding of stress fracture risk, to develop better assessment and prevention methods, all aimed at the preservation of bone health in military men and women. Currently, a significant research effort underway to protect and enhance bone health is targeting the elimination of training-related stress fractures.

Stress fracture injury has a marked impact on the health and force readiness of military personnel, imposing significant costs to the Department of Defense in terms of medical care, extended training time, attrition of military personnel and, ultimately, military readiness. It is one of the most common and potentially debilitating overuse injuries seen in military recruits today, particularly in women. Recent statistics show that approximately 50 percent of all women and 30 percent of all men sustain an overuse injury in basic training. The majority of soldiers pulled from training for rehabilitation suffer from stress fracture. Worse, 40 percent of the men and 60 percent of the women pulled from training due to stress fracture do not return to training. In fact, they are discharged from the military. Those who do return to training require 80 to 120 days of rehabilitation. At Fort Jackson alone, over a 1-year period an estimated \$26 million was spent on training 749 soldiers later discharged due to stress fracture. This does not include costs related to health care.

Stress fractures occur when muscles transfer the overload of strain to the bone, most commonly in the lower leg, and cause a tiny crack. Anyone who suddenly increases his or her frequency, intensity, or duration of physical activity, such as reservists or soldiers returning from long deployments where physical activity could not be undertaken on a regular basis, has an increased risk of developing lower body stress fractures. There are several forms of stress fractures that require more involved treatment. Stress fractures in the "knobby" part of the femur—the bone that fits into the hip socket or hip bone itself—sometimes progress to full fractures or larger fractures and interrupt the blood supply to the thigh bone portion of the hip joint. This in turn can cause early degenerative changes in the hip joint. Physicians consider this type of stress fracture to be a medical emergency for this reason. Other particularly slowly healing stress fractures include those of the navicular (foot bone), anterior cortex of the tibia (front portion of the mid-shin bone) and proximal fifth metatarsal (a bone in the foot). Healing takes months.

The Bone Health and Military Medical Readiness Research Program is already providing the military with some practical solutions to help protect, sustain and enhance the performance of military personnel. Research using animal and human models to study the influence of genetics, nutrition, exercise, and other influences on bone quality, and fracture risk, has revealed the following:

- The length of stride for women is related to fracture.
- Genetics plays a role not only in bone mineralization, but significantly influences other structural properties of bone that influence bone strength. Further, genetics influences the sensitivity of bone tissue to mechanical loading and unloading. ("Loading" is experienced when moving, with higher load experienced when bending over, lifting weights, etc.)
- In identical environments, the genetic influence of mechanical loading is site specific, and affects different kinds of bone differently.
- In the tibia, the most common site of stress fracture injury, bone tissue compensates for the smaller geometry of this bone through variations in material properties that result in increased susceptibility to bone damage under conditions of repetitive loading.
- Caloric restriction and calcium deficiency—common to women on diets—result in decreased structural properties of bone, and may contribute to decreased bone strength. (Weaker bones may suffer more damage.)
- Oral contraceptive use contributes to reduced bone mass accumulation. (Low bone mass increases fracture risk.)
- Chronic alcohol consumption inhibited tibial bone formation, possibly through observed decreases in production of the growth factor IGF-I.
- The growth factor IGF-I is critical for puberty-induced bone growth, further supporting a prominent role for IGF-I in bone formation.
- Meta-analyses—reviews of multiple studies—confirm that both aerobic exercise and resistance training improve bone density at multiple sites in women.

—Short-term exercise was sufficient to elicit improvements in mechanical properties of male but not female mice, indicating a gender-specific response to exercise.

—Individuals with dark skin or who are receiving minimal sun exposure—e.g. in late winter—demonstrate Vitamin D deficiency and may benefit from supplementation with Vitamin D, important in maintaining bone health.

As a result of research such as the above:

—A successful working prototype of a small-scale, high resolution positron emission tomography (PET) device was developed, for higher imaging and better identification of stress fractures.

—Acoustic emission, a promising new method to detect microdamage in bone, detected changes in bone prior to its breaking in a laboratory setting.

—Modifications have already been made to the U.S. Army physical fitness training program to decrease the volume of running and marching activities that take place during recruit training in an effort to reduce stress fracture injuries. This impact is being tracked.

—A study is ongoing to determine whether Vitamin D supplementation decreases the incidence of stress fracture in new recruits.

Additional bone research is needed, including better approaches to identify and improve bone health in at risk recruits, interventions to reduce stress fracture during strenuous physical training and deployment, and acceleration of stress fracture healing and return to full duty status. Areas of need include:

—Utilizing genetic (bone density, bone geometry), lifestyle (nutrition, exercise history), and other risk factors (menstrual status, oral contraceptive use, smoking) to establish a risk factor profile that identifies individuals at high risk for stress fracture injury.

—Expanding on preliminary findings that revealed gender differences in the response of bone to physical training.

—Conducting small pilot studies and larger clinical trials of resistance training, aerobic exercise training, and diet and nutrition interventions to improve bone quality in a military population and to determine whether they can be successfully implemented to prevent or reduce significantly the incidence of stress fracture in a basic training population.

—Advancing non-invasive bone imaging technologies to assess risk, identify stress fractures (easily missed by commonly used technology) and monitor healing.

Mr. Chairman, the bottom line is that stress fractures continue to occur, significantly impair military readiness, and delay the time to battlefield/deployment. Therefore, it is imperative that the Department of Defense build on recent findings and maintain an aggressive and sustained bone health research program at a level of \$6 million in fiscal year 2006.

Senator INOUE. Doctor, does your research indicate that there is a difference in the services? Does the Army suffer more stress than the Navy or the Air Force?

Dr. RECKER. No, the incidence of stress fractures seems to occur across the military, because the military basic training is pretty much similar in all the branches.

Senator INOUE. Do you believe that the training mode should be studied?

Dr. RECKER. Yes, it should, and it has been studied. On the one hand, we cannot reduce the physical fitness of our training at the end of training, and on the other hand we have to arrange the training program so that we do not have so much disability from and training loss from stress fractures and other overuse injuries. But stress fractures are the worst. So yes, we need to continue to study that to try to get training programs that will give us——

Senator INOUE. So your program is cost effective?

Dr. RECKER. I think so.

Senator INOUE. I thank you very much, sir.

Dr. RECKER. Thank you very much.

Senator INOUE. Our next witness is a member of the Board of Directors of the National Brain Injury Research, Treatment, and Training Foundation, Mr. Martin B. Foil, Jr. Mr. Foil.

STATEMENT OF MARTIN B. FOIL, JR., MEMBER, BOARD OF DIRECTORS, NATIONAL BRAIN INJURY RESEARCH, TREATMENT, AND TRAINING FOUNDATION

Mr. FOIL. Good morning, Senator Inouye—good afternoon, I guess. Nice to see you again and good to be here.

Senator INOUE. It is morning in Hawaii, sir.

Mr. FOIL. Point well taken.

I am happy to be here today and talk to you some about what some people call the signature condition of the conflict in Iraq, and that is traumatic brain injury (TBI), and to request \$14 million for the defense and veterans head injury program. Over the past year this program has treated 1,000 troops with TBI. You have probably seen this in the papers, including USA Today and People magazine, copies of which have been attached to the written statement.

Many of our service men and women are returning from Iraq with TBI's and not all have been appropriately diagnosed and treated. Through the work of the defense and veterans head injury program (DVHIP), we are able to identify most of these injuries, but unless we expand our research to areas where there are no treatment facilities or Veterans Administration (VA) hospitals many are going to fall through the cracks.

Last year you asked me how the DVHIP could assure the optimum care beyond its eight lead sites and the regional network of secondary VA hospitals. This has been a top priority for DVHIP, but the agency administering has had other priorities. So we are going to move the program to Fort Detrick. We think it will be more successful, and ideally we would like to have facilities much like Virginia NeuroCare throughout the country, which last year had a 35 percent return to active duty rate.

To meet immediate needs, DVHIP needs to offer a call for proposals for innovative clinical programs that will support distributed care networks. In addition, care coordinators will be strategically placed throughout the country for patients with TBI and their families in their home States.

DVHIP continues to focus on blast injury, especially for those who are hit with IEDs, and is leading the effort to provide guidelines for the assessment and follow-up care after these blast-related TBIs within the military environment.

Another priority is evaluating the connection between post-traumatic stress disorder (PTSD) and TBI. There are similarities in the symptoms, yet treatment for the two conditions is quite different. There is not much known about combat PTSD in persons with TBI. Clinically focused research initiatives by DVHIP would investigate this unique relationship to ensure that the troops are receiving the best care available for both their brain and their mind.

Mr. Chairman, there is \$7 million in the DOD budget. We are asking for a plus-up of \$7 million, so in all \$14 million is being requested for this important program. The funding is needed to continue training combat medics, surgeons, general medical officers and reservists and the best practices of TBI care, provide continuity of care from the battlefield to rehab and back to Active duty, and to work to ensure that no one falls through the cracks.

We are going to hope that you will continue to support our efforts to provide the best care possible to our Nation's brave men and women in uniform.

Thank you very much. Any questions?
[The statement follows:]

PREPARED STATEMENT OF MARTIN B. FOIL, JR.

My name is Martin B. Foil, Jr. and I am the father of Philip Foil, a young man with a severe brain injury. I serve as a volunteer on the Board of Directors of the National Brain Injury Research, Treatment and Training Foundation (NBIRTT)¹ and Virginia NeuroCare in Charlottesville, Virginia (VANC).² Professionally, I am the Chief Executive Officer and Chairman of Tuscarora Yarns in Mt. Pleasant, North Carolina.

On behalf of the thousands of military personnel that receive brain injury treatment and services annually, I respectfully request that a total of \$14 million be provided in the Department of Defense (DOD) Appropriations bill for fiscal year 2006 for the Defense and Veterans Head Injury Program (DVHIP). This request includes the \$7 million in the DOD's POM which we hope will be moved from the Uniformed Services University of the Health Sciences to the Army Medical Research and Materiel Command (AMRMC) at Fort Detrick. An additional \$7 million plus up would allow the important work of the program to continue, with clinical care coordinated through Walter Reed Army Medical Center (WRAMC) as the headquarters for the entire program.

TRAUMATIC BRAIN INJURY (TBI) MAY BE THE SIGNATURE CONDITION OF THE CONFLICT
IN IRAQ

Nearly 1,000 combat casualties from the Global War on Terrorism have been served by DVHIP, and that does not include active duty military injured in car crashes and other incidents occurring once they return home.³

As we reported in last year's testimony, the incidence of TBI sustained in theater was expected to be higher than in previous conflicts. That indeed has been true, and continues to be the case. In previous conflicts, TBI accounted for some 25 percent of combat casualties. However, last spring one WRAMC study found 61 percent of at-risk soldiers seen at WRAMC were assessed to have TBIs. Although this one study does not reflect the entire population of wounded in action, the high percentage suggests that TBI acquired in theater continues to be a problem that needs to be addressed. The reasons for the higher incidence of TBI include:

- The use of effective body armor has saved more lives;
- Medical personnel are more aware of the significance of mild closed TBIs and concussions and are therefore more likely to identify them; and
- The incidence of blast injuries in Iraq and Afghanistan is high.

There has also been an increase in awareness of TBI, mostly through news media reports of injured troops (e.g. recent USA Today and People articles are attached).⁴ Like Army Reserve Officer Alec Giess, featured in the People magazine story, some troops may not be diagnosed with TBI until months later. One of the greatest challenges the military health care and veterans systems face is to assure that no one falls through the cracks. The DVHIP is an important tool to assure a continuum of care, but the program requires additional resources to assure that no TBI is overlooked or misdiagnosed.

THE DEFENSE AND VETERANS HEAD INJURY PROGRAM (DVHIP)

Established in 1992, the DVHIP is a component of the military health care system that integrates clinical care and clinical follow-up, with applied research, treatment

¹NBIRTT is a non-profit national foundation dedicated to the support of clinical research, treatment and training.

²VANC provides brain injury rehabilitation to military personnel, veterans and civilians through an innovative and cost effective day treatment program.

³*Survivors of War Take Fatal Risks on Roads*, Gregg Zoroya, USA Today, May 3, 2005, pg. A1. http://www.usatoday.com/news/nation/2005-03-03-brain-trauma-lede_x.htm

⁴1T3AAAfter Iraq, Devastating New Wounds, High-tech body armor is saving soldiers' lives on the battlefield. But it's leaving them with brain damage, T. Fields-Myer, V. Bane, J. Podesta, R. Schlesinger, J. Voelker, People Magazine, May 9, 2005, pg. 223-5; *Key Iraq Wound: Brain Trauma, Body Armor Prevents Death, Not Damage*, Gregg Zoroya, USA Today, March 4, 2005, pg. A1. <http://www.palo-alto.med.va.gov/resources/docs/polytrauma/media/PeopleMagazine050905-Print.pdf>

and training. The program was created after the first Gulf War to address the need for an overall systemic program for providing brain injury specific care and rehabilitation within DOD and DVA. The DVHIP seeks to ensure that all military personnel and veterans with brain injury receive brain injury-specific evaluation, treatment and follow-up. Clinical care and research is currently undertaken at seven DOD and DVA sites and one civilian treatment site.⁵ In addition to providing treatment, rehabilitation and case management at each of the 8 primary DVHIP centers, the DVHIP includes a regional network of additional secondary veterans' hospitals capable of providing TBI rehabilitation, and linked to the primary lead centers for training, referrals and consultation. This is coordinated by a dedicated central DVA TBI coordinator and includes an active TBI case manager training program. DVHIP also provides education to providers and patients' families.

CONTINUING EFFORTS AND CURRENT CHALLENGES

Clinical Care

DVHIP continues to ensure optimal care, conduct clinical research, provide educational programs on TBI as well as provide family support for active duty military and veterans. All DVHIP sites have maintained and many have increased treatment capacity. This has been a direct response to the influx of patients seen secondary to Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF). WRAMC receives more casualties from theater than all of the other military treatment facilities (MTFs) in the continental United States. Patients are often seen at WRAMC within a week or two after injury and many of these patients have multiple injuries (e.g., TBI, traumatic amputations, shrapnel wounds, etc.).

To meet the increased demand, screening procedures were developed by DVHIP headquarters and clinical staff. The DVHIP clinical staff reviews all incoming casualty reports at WRAMC and screens all patients who may have sustained a brain injury based on the mechanism of injury (i.e., blast/explosion, vehicular accident, fall, gunshot wound to the head, etc.). DVHIP screening is identifying TBI patients that might otherwise go undetected, posing a potential threat to patients and, in the case of premature return to active duty, military readiness.

Community Reentry and Return To Work

As of April 29, 2005, a full 35 percent of soldiers treated at Virginia NeuroCare (VANC) returned to active duty. As a core program of the DVHIP, VANC provides innovative community based rehabilitation programs that maximize functional independence and facilitate re-entry into family and community life. VANC's coordination with the Judge Advocate General (JAG) school, in which active duty soldiers get back into the military environment and develop work skills as well as participate in military exercises has demonstrated its excellence in the continuum of care received by injured military personnel. Housing for eight additional beds is needed, however, to accommodate the increase in active duty patients enrolled at VANC.

Blast Injury Research

Improved body armor, the significance of even mild brain injury, and the high frequency of troops wounded in blasts all lead to blast-induced TBI being an important health issue in this war. DVHIP at WRAMC has identified over 400 patients who have sustained TBIs in OIF/OEF, most of whom have been injured in blasts. The goal of TBI treatment is to maintain individuals at duty whenever possible without negatively affecting the unit mission or the individual service member and to maximize the individual service member's potential for long term productivity and quality of life.

The DVHIP is leading the effort to elucidate patterns of brain injury from blast, including providing guidelines for the assessment and follow-up care after blast-related TBI within the military environment. Ongoing DVHIP research is linked to clinical care programs to ensure that information learned from caring for these individuals will be disseminated to military and veteran treatment facilities and added to the medical literature. Continuing collaboration with military experts on blast, working with preclinical subjects, also will help to better understand the injuries our troops sustain.

⁵Walter Reed Army Medical Center, Washington, DC; James A. Haley Veterans Hospital, Tampa, FL; Naval Medical Center San Diego, San Diego, CA; Minneapolis Veterans Affairs Medical Center, Minneapolis, MN; Veterans Affairs Palo Alto Health Care System, Palo Alto, CA; Virginia Neurocare, Inc., Charlottesville, VA; Hunter McGuire Veterans Affairs Medical Center, Richmond, VA; Wilford Hall Medical Center, Lackland Air Force Base, TX.

Medic Training

In response to an unmet need identified at the March 2004 DVHIP co-sponsored Neurotrauma in Theater: Lessons Learned from Iraq and Afghanistan conference, DVHIP is developing a Combat Medic Training module, to be made available online and in theater by November 2005. DVHIP continues to proactively train deploying clinicians and care providers at troop-intensive military treatment facilities. A military first responder (Medic) online training course, which will offer CME and CEU credits, will be available online and in theater by early summer. Additional education initiatives include a Coordination of Care Guide for TBI case managers, multiple Grand Rounds, and the dissemination of DVHIP research and clinical practice publications.

Post Deployment Forms

DVHIP will continue its efforts to have blast and head injury exposure added to the current Post Deployment form. DVHIP's experience in identifying individuals with TBI and referring them for care at Ft. Bragg and Camp Pendleton will be turned into management algorithms for large scale use.

NEW INITIATIVES

Improving Access to TBI Specific Care

In order to assure that TBI specific care is available to individuals after leaving specialty treatment centers, DVHIP will offer a call for proposals for innovative clinical programs that will establish distributed care networks. Outcomes measurement will include patient level of independence, family education and satisfaction, and cost savings analyses. TBI care is currently centralized at DVHIP lead centers: four VA and three military medical centers, and one civilian community re-entry center. Patients who need TBI specialty follow-up care may be forced to travel great distances to receive it. Thus, proposals will be solicited to address this need, including bringing specialty TBI outpatient care to areas with no VA hospital (e.g., Alaska). Proposals for two types of programs will be elicited:

- TBI Community care.*—Coordinated TBI case management, to include family support initiatives, has the potential to greatly facilitate community re-entry among TBI survivors. Proposals to be considered include augmented clinics and telemedicine. To be considered for funding, proposals must have clear outcome measures designed to quantify improvements in patient self-sufficiency and cost-savings to the Federal Government.
- Treatment of neurobehavioral consequences of TBI.*—Often the most disturbing to patients and families, neurobehavioral problems such as memory, personality, and mood may complicate re-entry to home and other relationships. Innovative, community-based programs that add neurobehavioral expertise for ongoing care of patients with TBI will be solicited.

TBI and Mental Health Evaluation

As soldiers return home, much attention is often paid to the possibility of post-traumatic stress disorder (PTSD). One critical area not to be overlooked is the relationship between TBI and PTSD. Research suggests that patients with both PTSD and TBI are an important population to identify, though not much is known about combat PTSD in persons with TBI. While there are some similarities in initial symptoms (headaches, trouble focusing, irritability), treatment for PTSD and TBI are indeed very different. Clinically focused research initiatives by DVHIP would investigate the unique relationship between TBI and PTSD to ensure that the troops are receiving the best care available for both their brain and their mind. Additional initiatives could focus on mental health providers, who may where individuals with TBI present for care.

TBI Assessment in Theater

DVHIP is leading the effort to provide evidence-based guidelines for the assessment and follow-up care after blast-related TBI within the military environment. An integral part of this effort is the development of militarily relevant concussion guidelines that are medically and scientifically based. Existing sports concussion guidelines are not fully applicable to combat situations—particularly because post injury symptoms may put the individual and fellow troops at risk. Medics and clinicians in theater have voiced great interest in objective tools to aide in the diagnosis and management of TBI. DVHIP is continuing to work toward the final development and deployment of a computerized assessment battery for concussion. DVHIP's unique role in ensuring state of the art clinical care throughout the various levels from battlefield to community reentry makes this possible.

A January 2005, GAO report on vocational rehabilitation for injured service members emphasized that early intervention following TBI is highly correlated with positive outcomes.⁶ By making it possible to identify TBI immediately following an injury, America's war fighters will receive the best care possible. Widespread use of a TBI assessment battery will ensure that medics and clinicians in theater follow evidence-based concussion guidelines.

TBI Screening

The addition of a TBI clinician at key medical transfer points such as Landstuhl Regional Medical Center (LRMC) in Germany and Andrews Air Force Base will ensure that the screening process developed at WRAMC by DVHIP identifies wounded service members who may also have a TBI. The implementation of screening at WRAMC has identified TBI in many soldiers who were not yet diagnosed with TBI. This effort would augment the current Joint Theater Trauma Registry that has limited information on brain injury, especially milder forms of TBI.

Clinical Registry Database

DVHIP proposes to develop a clinical registry, designed for obtaining information on TBI patients far forward and following their clinical outcomes. The database will also allow for rapid response to clinical questions from military and VA medical leaders regarding the incidence and outcome of TBI as well as permit the sharing of medical information between clinicians and case managers. Additionally, this will enable medical providers in theater to communicate questions regarding TBI patients to the DVHIP, and facilitate the timely transfer of patients to appropriate VA and military programs. This can be completed as a stand alone project focused on hospital and in-theater care, or as an augmentation of the Joint Theater Trauma Registry database.

Educational Outreach

There is a need for greater educational outreach (teams of trainers or other types of educational outreach) at specific non-DVHIP military medical facilities and troop intensive sites (e.g. Fort Hood, Fort Carson, etc.) to provide TBI training and education for providers with direct contact with large numbers of troops, both troops stationed locally and troops returning from theater (e.g., Reservists). This effort could also increase DVHIP's reach in surveillance to include centers beyond those in the core DVHIP network.

An educational outreach team was very successful in educating providers of the 249th General Hospital who were deploying to Afghanistan without a neurosurgeon, as allied neurosurgical injuries were not anticipated. Training in neurocare was provided at Fort Gordon and contact continued via email after the 249th reached Afghanistan.

CONCLUSION

In NBIRTT's view, the Congress has been very responsive to the needs of our brave men and women in uniform who risk their lives for us. We urge your continued support for active duty military men and women sustaining brain injuries, whether in combat or at home. The DVHIP has stepped up to the plate to meet the needs of soldiers with brain injuries. Please support \$14 million for the DVHIP in the fiscal year 2006 Defense Appropriations bill under AMRMC, Fort Detrick to continue this important program.

Thank you.

Senator INOUE. Will the VA benefit from your program?

Mr. FOIL. Yes, sir.

Senator INOUE. Will you be able to seal up the cracks so they will not fall through?

Mr. FOIL. Well, nothing is 100 percent positive. But last year, if you remember, you and Senator Stevens asked us how we are going to help Hawaii and Alaska. You remember that?

Senator INOUE. Yes, we have got big cracks there.

Mr. FOIL. That is right. Well, you heard me talk about care coordinators. What we would like to do and what our agenda is if we get this money is to take this—hold on just a minute. Let us see.

⁶Vocational Rehabilitation: More VA and DOD Collaboration Needed to Expedite Services for Seriously Injured Service members, GAO-05-167 (Washington, DC: January 2005).

There are a couple of places in Hawaii that we are looking at that if we have the money to do this we would like to look at, Tripler Army Medical Center in Honolulu and the VA Medical Center in Honolulu. We would like to place a care coordinator in there, and their job is going to be to start a program much like we see here in the United States that has been so successful.

In Alaska there are a couple of opportunities, Bassett Army Community Hospital in Fort Wainwright, which is in Fairbanks, and there is a medical facility at Elmendorf Air Base called the Health and Wellness Center in Anchorage. Also, the VA Medical Center in Alaska is in Anchorage with two other outpatient clinics in both Fairbanks and Kenai—is that the way you pronounce it?

Senator STEVENS [presiding]. “KEE-nie.”

Mr. FOIL. “KEE-nie.”

Senator STEVENS. Kenai, it is the home of the greatest salmon in the world.

Mr. FOIL. All right, sir. I stand corrected.

But there is a lot to be done and I think we have the opportunity to do this and do it properly. But we need your support to be able to get it done, Senators. We would love to have the opportunity to do this both in Hawaii and Alaska, and there are other places where we do not have those opportunities.

Senator INOUE. Thank you very much, sir.

Mr. FOIL. Thank you, sir.

Senator STEVENS. Doctor, we are going to try to make sure that we do move that budget over to the Army Medical Research and Material Command at Fort Detrick. We agree with you on that and we will do our best to do that.

Mr. FOIL. Thank you very much. We really appreciate it.

Senator STEVENS. Our next witness is Dennis Duggan, Deputy Director, National Security Commission for the American Legion. Comrade, it is nice to see you.

STATEMENT OF DENNIS MICHAEL DUGGAN, DEPUTY DIRECTOR, NATIONAL SECURITY COMMISSION, THE AMERICAN LEGION

Mr. DUGGAN. Yes, sir, nice to see you again. Mr. Chairman and ranking member, Senator Inouye: The American Legion, the Nation's largest organization of wartime veterans, is extremely grateful for this opportunity to present its views on defense appropriations for fiscal year 2006. We have always valued your leadership and your subcommittee's leadership in assessing and authorizing adequate funding for quality of life, modernization, and readiness features for the Nation's armed forces, Active, Reserve, National Guard, as well as for our Nation's military retiree veterans and their dependents.

As we know too well, the war on terrorism is being waged on two fronts, overseas in a bitter, bloody struggle with armed insurgents and at home, protecting and securing the homeland. Most of what we hold dear as Americans was made possible by the peace and stability that the armed forces have provided by taking the fight to the enemy in overseas battlegrounds.

However, a decade of overuse of a smaller Army, a large-scale use of reservists and National Guardsmen in combat, and a past

history of some underfunding has certainly warranted your sustained investment. And, Mr. Chairman, it is deeply appreciated.

The American Legion continues to urge an increase in Army manpower strengths. We also are strongly supportive of congressional authorization and funding of the necessary recruiting tools, particularly for the Army, Army Reserve, and Army National Guard, and perhaps the Marines. The funding of even more recruiting bonuses, recruiters, advertising as appropriate should be funded if needed.

Funding of an improved Montgomery Government Issue (GI) bill for the Active and Reserve components was certainly justified, and increased death gratuities and traumatic injury insurance we believe are overdue as well.

We salute the Senate in protecting our troops and boosting military benefits.

Mr. Chairman, while we are fighting what will likely be a long, hard war on terrorism, we believe we must also keep an eye on the Far East, particularly North Korea and China. Both countries are flexing their military muscles in the Pacific while the United States is distracted at war in Iraq and Afghanistan. For that reason, we are extremely grateful that the Senate is requiring the Navy to retain the 12-carrier fleet Navy rather than scaling back.

As a concerned veterans organization, something tells us perhaps that we should also be producing more than four Aegis DDGs per year and perhaps not discharging as many as the 10,000 sailors that we seem to be doing.

Finally, with regard to the 2005 defense BRAC, the American Legion would only urge that irreplaceable base facilities and essential base facilities, perhaps such as military medical facilities and commissaries and perhaps training areas, be retained for use by Reserve components as needed or by military retiree veterans and their families whenever such is possible.

Mr. Chairman, that concludes the oral statement of the American Legion and we thank you again for this opportunity.

[The statement follows:]

PREPARED STATEMENT OF DENNIS MICHAEL DUGGAN

Mr. Chairman, the American Legion is grateful for the opportunity to present its views on defense appropriations for fiscal year 2006. The American Legion values your leadership in assessing and authorizing adequate funding for quality-of-life (QOL) features of the Nation's armed forces to include the active, reserve and National Guard forces and their families, as well as quality of life for military retirees and their dependents.

Since September 2001, the United States has been involved in the war against terrorism in Operations Iraqi Freedom and Enduring Freedom. American fighting men and women are again proving they are the best-trained, best-equipped and best-led military in the world. As Secretary of Defense Donald Rumsfeld has noted, the war in Iraq is part of a long, dangerous global war on terrorism. The war on terrorism is being waged on two fronts: overseas against armed insurgents and at home protecting and securing the Homeland. Casualties in the shooting wars, in terms of those killed and seriously wounded, continue to mount daily. Indeed, most of what we as Americans hold dear is made possible by the peace and stability that the Armed Forces provide by taking the fight to the enemy.

The American Legion adheres to the principle that this Nation's armed forces must be well-manned and equipped, not just to pursue war, but to preserve and protect the peace. The American Legion strongly believes past military downsizing was budget-driven rather than threat focused. Once Army divisions, Navy warships and Air Force fighter squadrons are downsized, eliminated or retired from the force

structure, they cannot be reconstituted quickly enough to meet new threats or emergency circumstances. The Marine Corps, Army National Guard and the Reserves have failed to meet their recruiting goals and the Army's stop-loss policies have obscured retention and recruiting needs. Clearly, the active Army is struggling to meet its recruitment goals. Military morale undoubtedly has been adversely affected by the extension and repetition of Iraq tours of duty.

The administration's fiscal year 2006 budget requests \$419.3 billion for defense or about 17 percent of the total budget. The fiscal year 2006 defense budget represents a 4.8 percent increase in defense spending over current funding levels. It also represents about 3.5 percent of our Gross National Product. Active duty military manpower end-strength is now over 1.388 million. Selected Reserve strength is about 863,300 or reduced by about 25 percent from its strength levels during the Gulf War of 14 years ago.

Mr. Chairman, this budget must advance ongoing efforts to fight the global war on terrorism, sustain and improve quality of life and continue to transform the military. A decade of over use of the military and past under-funding, necessitates a sustained investment. The American Legion believes the budget must continue to address increases in Army end-strengths, accelerate improved Active and Reserve Components quality of life features, provide increased funding for the concurrent receipt of military retirement pay and VA disability compensation ("Veterans Disability Tax"); and elimination of the offset of survivors benefit plan (SBP) and Dependency and Indemnity Compensation (DIC) that continues to penalize military survivors.

If we are to win the war on terror and prepare for the wars of tomorrow, we must take care of the Department of Defense's greatest assets—the men and women in uniform. They do us proud in Iraq, Afghanistan and around the world. They need help.

In order to attract and retain the necessary force over the long haul, the active duty force, Reserves and National Guard continue to look for talent in an open market place and to compete with the private sector for the best young people this Nation has to offer. If we are to attract them to military service in the active and reserve components, we need to count on their patriotism and willingness to sacrifice, to be sure, but we must also provide them the proper incentives. They love their country, but they also love their families—and many have children to support, raise and educate. We have always asked the men and women in uniform to voluntarily risk their lives to defend us; we should not ask them to forego adequate pay and allowances, adequate health care and subject their families to repeated unaccompanied deployments and sub-standard housing as well. Undoubtedly, retention and recruiting budgets need to be substantially increased if we are to keep and recruit quality service members.

The President's fiscal year 2006 defense budget requests over \$105 billion for military pay and allowances, including a 3.1 percent across-the-board pay raise. It also includes billions to improve military housing, putting the Department on track to eliminate most substandard housing by 2007—several years sooner than previously planned. The fiscal year 2005 budget further lowered out-of-pocket housing costs for those living off base. The American Legion encourages the Subcommittee to continue the policy of no out-of-pocket housing costs in future years.

Together, these investments in people are critical, because smart weapons are worthless to us unless they are in the hands of smart, well-trained soldiers, sailors, airmen, Marines and Coast Guard personnel.

The American Legion National Commanders have visited American troops in Europe, the Balkans, and South Korea as well as a number of installations throughout the United States, including Walter Reed Army Medical Center and Bethesda National Naval Medical Center. During these visits, they were able to see first hand the urgent, immediate need to address real quality of life challenges faced by service members and their families. Severely wounded service members who have families and are convalescing in military hospitals clearly need to have their incomes increased when they are evacuated from combat zones. Also, the medical evaluation board process needs to be expedited so that military severance and disability retirement pays will be more immediately forthcoming. Our National Commanders have spoken with families on Women's and Infants' Compensation (WIC), where quality-of-life issues for service members, coupled with combat tours and other operational tempos, play a role in recurring recruitment and retention efforts and should come as no surprise. The operational tempo and lengthy deployments, other than combat tours, must be reduced or curtailed. Military missions were on the rise before September 11 and deployment levels remain high. The only way to reduce repetitive overseas tours and the overuse of the Reserves is to increase active duty and perhaps reserve end-strengths for the services. Military pay must be on a par with the

competitive civilian sector. Activated reservists must receive the same equipment, the same pay and timely health care as active duty personnel. If other benefits, like health care improvements, commissaries, adequate quarters, quality child care and impact aid for DOD education are reduced, they will only serve to further undermine efforts to recruit and retain the brightest and best this nation has to offer.

To step up efforts to bring in enlistees, all the Army components are increasing the number of recruiters. The Army National Guard sent 1,400 new recruiters into the field last February. The Army Reserve is expanding its recruiting force by about 80 percent. If the recruiting trends and the demand for forces persist, the Pentagon under current policies could eventually "run out" of reserve forces for war zone rotation, a Government Accountability Office expert warned. The Pentagon projects a need to keep more than 100,000 reservists continuously over the next 3 to 5 years. The Defense Appropriations bill for fiscal year 2005 provides the funding for the first year force level increases of 10,000. The Army's end-strength increased 30,000 and the Marine Corps end-strength increased 3,000.

Army restructuring will increase the number of active Army maneuver brigades by 30 percent by fiscal year 2007. The Army National Guard will reach 34 brigades. The Marine Corps will increase by two battalions.

The budget deficit is projected to be \$427 billion; the largest in U.S. history and it appears to be heading higher perhaps to \$500 billion. National defense spending must not become a casualty of deficit reduction.

FORCE HEALTH PROTECTION (FHP)

As American military forces are again engaged in combat overseas, the health and welfare of deployed troops is of utmost concern to The American Legion. The need for effective coordination between the Department of Veterans Affairs and the DOD in the force protection of U.S. forces is paramount. It has been 14 years since the first Gulf War, yet many of the hazards of the 1991 conflict are still present in the current war.

Prior to the 1991 Gulf War deployment, troops were not systematically given comprehensive pre-deployment health examinations nor were they properly briefed on the potential hazards, such as fallout from depleted uranium munitions they might encounter. Record keeping was poor. Numerous examples of lost or destroyed medical records of active duty and reserve personnel were identified. Physical examinations (pre- and post-deployment) were not comprehensive and information regarding possible environmental hazard exposures was severely lacking. Although the government had conducted more than 230 research projects at a cost of \$240 million, lack of crucial deployment data resulted in many unanswered questions about Gulf War veterans illnesses.

The American Legion would like to specifically identify an element of FHP that deals with DOD's ability to accurately record a service member's health status prior to deployment and document or evaluate any changes in his or her health that occurred during deployment. This is exactly the information VA needs to adequately care for and compensate service members for service-related disabilities once they leave active duty. Although DOD has developed post-deployment questionnaires, they still do not fulfill the requirement of "thorough" medical examinations nor do they even require a medical officer to administer the questionnaires. Due to the duration and extent of sustained combat in Operations Iraqi Freedom and Enduring Freedom, the psychological impact on deployed personnel is of utmost concern to The American Legion. VA's ability to adequately care for and compensate our Nation's veterans depends directly on DOD's efforts to maintain proper health records/health surveillance, documentation of troop locations, environmental hazard exposure data and the timely sharing of this information with the VA.

The American Legion strongly urges Congress to mandate separation physical exams for all service members, particularly those who have served in combat zones or have had sustained deployments. DOD reports that only about 20 percent of discharging service members opt to have separation physical exams. During this war on terrorism and frequent deployments with all their strains and stresses, this figure, we believe, should be substantially increased.

MILITARY QUALITY OF LIFE

Our major national security concern continues to be the enhancement of the quality of life issues for active duty service members, reservists, National Guardsmen, military retirees and their families. During the last Congressional session, President Bush and the Congress made marked improvements in an array of quality of life issues for military personnel and their families. These efforts are vital enhancements that must be sustained.

Mr. Chairman: during this period of the War on Terrorism, more quality of life improvements are required to meet the needs of servicemembers and their families as well as military retiree veterans and their families. For example, the totally inadequate \$12,000 death gratuity needs to be increased to \$100,000 and the SGLI needs to be increased to at least \$400,000; the improved Reserve MGIB for education needs to be completely funded as well; combat wounded soldiers who are evacuated from combat zones to military hospitals need to retain their special pay (combat pay, family separation pay, etc) and base pay and allowances during the period of their convalescence continued at the same level to not jeopardize their families' financial support during recovery. Furthermore, the medical evaluation board process needs to be expedited so that any adjudicated military severance or military disability retirement payments will be immediately forthcoming; recruiting and retention efforts, to include the provision of more service recruiters, needs to be fully funded as does recruiting advertising. The Defense Health Program and in particular the Uniformed Services University of the Health Sciences must also be fully appropriated. The American Legion appreciates the administration and Congress's support of the Wounded Warrior bill designed to provide financial help to soldiers and their families when they are wounded or otherwise traumatically injured.

Likewise, military retiree veterans as well as their survivors, who have served their Country for decades in war and peace, require continued quality of life improvements as well. First and foremost, The American Legion strongly urges that FULL concurrent receipt and Combat-Related Special Compensation (CRSC) be authorized for disabled retirees whether they were retired for longevity (20 or more years of service) or military disability retirement with fewer than 20 years. In particular, The American Legion urges that disabled retirees rated 40 percent and below be authorized CRPD and that disabled retirees rated between 50 percent and 90 percent disabled be authorized non-phased-in concurrent receipt. Additionally, The American Legion strongly urges that ALL military disability retirees with fewer than 20 years service be authorized to receive CRSC and VA disability compensation provided, of course, they're otherwise eligible for CRSC under the combat-related conditions.

Secondly, The American Legion urges that the longstanding inequity whereby military survivors have their survivors benefit plan (SBP) offset by the Dependency and Indemnity Compensation (DIC) be eliminated. This "Widows' Tax" needs to be eliminated as soon as possible. It is blatantly unfair and has penalized deserving military survivors for years. A number of these military survivors were nearly impoverished because of this unfair provision. As with concurrent receipt for disabled retirees, military survivors should receive both SBP AND DIC. They have always been entitled to both and should not have to pay for their own DIC. The American Legion will continue to convey that simple, equitable justice is the primary reason to fund FULL concurrent receipt of military retirement pay and VA disability compensation as well as the survivors benefit plan (SBP) and DIC for military survivors. Not to do so merely continues the same inequity. Both inequities need to be righted by changing the unfair law that prohibits both groups from receiving both forms of compensation.

Mr. Chairman: the American Legion as well as the armed forces and veterans continue to owe you and this subcommittee a debt of gratitude for your support of military quality of life issues. Nevertheless, your assistance is needed in this budget to overcome old and new threats to retaining and recruiting the finest military in the world. Service members and their families continue to endure physical risks to their well-being and livelihood as well as the forfeiture of personal freedoms that most Americans would find unacceptable. Worldwide deployments have increased significantly and the Nation is at war. The very fact that over 300,000 Guardsmen and Reservists have been mobilized since September 11, 2001 is first-hand evidence that the United States Army desperately needs to increase its end-strengths and maintain those end-strengths so as to help facilitate the rotation of active and reserve component units to active combat zones.

The American Legion congratulates and thanks congressional subcommittees such as this one for military and military retiree quality of life enhancements contained in past National Defense Appropriations Acts. Continued improvement however is direly needed to include the following:

- Completely Closing the Military Pay Gap with the Private Sector.*—With U.S. troops battling insurgency and terrorism in Iraq and Afghanistan, The American Legion supports the proposed 3.1 percent military pay raise as well as increases in Basic Allowance for Housing (BAH).
- Commissaries.*—The American Legion urges the Congress to preserve full Federal subsidizing of the military commissary system and to retain this vital non-

pay compensation benefit for use by active duty families, reservist families, military retiree families and 100 percent service-connected disabled veterans and others.

- DOD Domestic Dependents Elementary and Secondary Schools (DDESS)*.—The American Legion urges the retention and full funding of the DDESS as they have provided a source of high quality education for military children attending schools on military installations.
- Funding the Reserve Montgomery GI Bill for Education.
- Increasing the death gratuity to \$100,000 and \$400,000 for SGLI for all active duty or activated Reservists who are killed or who die while on active duty after September 11, 2001 during the War on Terror.
- Improving the pay of severely wounded service members and expediting the medical evaluation board process.
- Providing FULL concurrent receipt of military retirement pay and VA disability compensation for those disabled retirees rated 40 percent and less; providing non-phased concurrent receipt for those disabled retirees rated between 50 percent and 90 percent disabled by the VA; and authorizing those military disability retirees with fewer than 20 years service to receive both VA disability compensation and Combat-Related Special Compensation (CRSC).
- Eliminating the offset of the survivors benefit plan (SBP) and Dependency and Indemnity Compensation (DIC) for military survivors.

OTHER QUALITY OF LIFE INSTITUTIONS

The American Legion strongly believes that quality of life issues for retired military members and their families are augmented by certain institutions which we believe need to be annually funded as well. Accordingly, The American Legion believes that Congress and the administration must place high priority on insuring these institutions are adequately funded and maintained:

- The Uniformed Services University of the Health Sciences*.—The American Legion urges the Congress to resist any efforts to less than fully fund, downsize or close the USUHS through the BRAC process. It is a national treasure, which educates and produces military physicians and advanced nursing staffs. We believe it continues to be an economical source of CAREER medical leaders who enhance military health care readiness and excellence and is well-known for providing the finest health care in the world.
- The Armed Forces Retirement Homes*.—The United States Soldiers' and Airmen's Home in Washington, DC and the United States Naval Home in Gulfport, Mississippi, are under-funded as evidenced by the reduction in services to include on-site medical health care and dental care. Increases in fees paid by residents are continually on the rise. The medical facility at the USSAH has been eliminated with residents being referred to VA Medical Centers or Military Treatment Facilities such as Walter Reed Army Medical Center. The American Legion recommends that the Congress conduct an independent assessment of these two facilities and the services being provided with an eye toward federally subsidizing these two Homes as appropriate. Both facilities have been recognized as national treasures until recent years when a number of mandated services have been severely reduced and resident fees have been substantially increased.
- Arlington National Cemetery*.—The American Legion urges that the Arlington National Cemetery be maintained to the highest of standards. We urge also that Congress mandate the eligibility requirements for burial in this prestigious Cemetery reserved for those who have performed distinguished military service and their spouses and eligible children.
- 2005 Defense Base Realignment and Closure Commission*.—The American Legion urges that certain base facilities such as military medical facilities, commissaries, exchanges and training facilities and other quality of life facilities be preserved for use by the active and reserve components and military retirees and their families.

THE AMERICAN LEGION FAMILY SUPPORT NETWORK

The American Legion continues to demonstrate its support and commitment to the men and women in uniform and their families. The American Legion's Family Support is providing immediate assistance primarily to activated National Guard families as requested by the Director of the National Guard Bureau. The American Legion Family Support Network has reached out through its Departments and Posts to also support the Army's Disabled Soldier Support System (DS3). Many thousands of requests from these families have been received and accommodated by the Amer-

ican Legion Family across the United States. Military family needs have ranged from requests for funds to a variety of everyday chores which need doing while the "man or woman" of the family is gone. The American Legion, whose members have served our Nation in times of adversity, remember how it felt to be separated from family and loved ones. As a grateful Nation, we must ensure that no military family endures those hardships caused by military service, as such service has assured the security, freedom and ideals of our great Country.

CONCLUSIONS

Thirty-two years ago, America opted for an all-volunteer force to provide for the National Defense. Inherent in that commitment was a willingness to invest the needed resources to bring into existence and maintain a competent, professional and well-equipped military. The fiscal year 2006 defense budget, while recognizing the War on Terrorism and Homeland Security, represents another good step in the right direction. Likewise our military retiree veterans and military survivors, who in yearteyear served this Nation for decades, continue to need your help as well.

Mr. Chairman, This concludes our statement.

Senator STEVENS. Thank you very much.

Do you have any comments?

Senator INOUE. I support.

Senator STEVENS. We generally support what you have said. I disagree with you on the aircraft carriers, but he agrees with you, so you are ahead.

Thank you very much for your testimony.

Mr. DUGGAN. Thank you, sir.

Senator STEVENS. Next is Lieutenant Colonel (retired) Paul Austin of the American Association of Nurse Anesthetists. Yes, sir.

STATEMENT OF LIEUTENANT COLONEL PAUL N. AUSTIN, CRNA, Ph.D., U.S. AIR FORCE (RETIRED), ON BEHALF OF THE AMERICAN ASSO- CIATION OF NURSE ANESTHETISTS

Dr. AUSTIN. Chairman Stevens and Senator Inouye: Good afternoon. My name is Dr. Paul Austin and I'm a certified registered nurse anesthetist (CRNA), recently retired from the U.S. Air Force after 24 years of proudly serving my country. For the majority of this time I served as a nurse anesthesia educator who was the Director of both the U.S. Air Force and the Uniformed Services University nurse anesthesia programs.

The American Association of Nurse Anesthetists (AANA) represents more than 30,000 CRNAs, including 483 Active duty CRNAs, 790 reservists in the military. CRNAs continue to be deployed to the Middle East for Operation Iraqi Freedom and Operation Enduring Freedom, providing anesthesia in all types of surgical procedures, both on ships and on the ground.

In many cases CRNAs are the sole anesthesia providers for our troops, which General Brannon stated before this subcommittee last week, and I quote: "Lieutenant Colonel Bonnie Mack and Major Virginia Johnson are CRNAs deployed to Tallil Air Base in Iraq as the only anesthesia providers for over 20,000 U.S. and coalition forces and civilian contract personnel."

Today maintaining adequate numbers of Active duty CRNAs is of the utmost importance to the Department of Defense to meet its military medical readiness mission. For several years the number of CRNAs serving on Active duty has fallen somewhat short of the number authorized by the DOD. This is complicated by the strong demand for CRNAs in both the public and private sectors. This considerable gap between civilian and military pay was addressed

in the fiscal year 2003 Defense Authorization Act with an incentive specialty pay, or ISP, increase from \$15,000 to \$50,000. The AANA appreciates this subcommittee's continued support to fund the ISP to retain and to recruit CRNAs.

Last, the establishment of the joint VA–DOD program in nurse anesthetist education at Fort Sam Houston in San Antonio holds the promise of making significant improvements in the VA CRNA workforce and improving retention of VA registered nurses (RNs) in a cost effective manner. This 30-month program attracts RNs into VA service by sending RNs a strong message that the VA is committed to their educational advancement.

Due to continued interest by VA RNs in the program, the program will be expanding to five openings for the June 2005 class. In addition, this partnership enables the VA faculty director to cover her Army colleagues' classes when they are deployed at a moment's notice.

In conclusion, the AANA believes that the recruitment and retention of CRNAs in the services is critical to our men and women in uniform. Continued funding of the ISP will help meet this challenge. The AANA thanks this subcommittee for your continued support for CRNAs in the military.

[The statement follows:]

PREPARED STATEMENT OF LIEUTENANT COLONEL (RET.) PAUL N. AUSTIN

Chairman Stevens, Ranking Member Inouye, and members of the subcommittee, the American Association of Nurse Anesthetists (AANA) is the professional association representing over 30,000 certified registered nurse anesthetists (CRNAs) in the United States, including 482 active duty and 799 reservists in the military. The AANA appreciates the opportunity to provide testimony regarding CRNAs in the military. We would also like to thank this committee for the help it has given us in assisting the Department of Defense (DOD) and each of the services to recruit and retain CRNAs.

BACKGROUND INFORMATION ON NURSE ANESTHETISTS

Let us begin by describing the profession of nurse anesthesia, and its history and role with the military medical system.

In the administration of anesthesia, CRNAs perform the same functions as anesthesiologists and work in every setting in which anesthesia is delivered including hospital surgical suites and obstetrical delivery rooms, ambulatory surgical centers, health maintenance organizations, and the offices of dentists, podiatrists, ophthalmologists, and plastic surgeons. Today CRNAs participate in approximately 65 percent of the anesthetics given to patients each year in the United States. Nurse anesthetists are also the sole anesthesia providers in more than two-thirds of rural hospitals, assuring access to surgical, obstetrical and other healthcare services for millions of rural Americans.

CRNAs have a personal and professional commitment to patient safety, made evident through research into our practice. In our professional association, we state emphatically "our members' only business is patient safety." Safety is assured through education, high standards of professional practice, and commitment to continuing education. Having first practiced as registered nurses, CRNAs are educated to the master's degree level and meet the most stringent continuing education and recertification standards in the field. Thanks to this tradition of advanced education, the clinical practice excellence of anesthesia professionals, and the advancement in technology, we are humbled and honored to note that anesthesia is 50 times safer now than 20 years ago (National Academy of Sciences, 2000). Research further demonstrates that the care delivered by CRNAs, anesthesiologists, or by both working together yields similar patient safety outcomes. In addition to studies performed by the National Academy of Sciences in 1977, Forrest in 1980, Bechtholdt in 1981, the Minnesota Department of Health in 1994, and others, Dr. Michael Pine, MD, MBA recently concluded once again that among CRNAs and physician anesthesiologists, "the type of anesthesia provider does not affect inpatient surgical mortality" (Pine,

2003). Thus, the practice of anesthesia is a recognized specialty in nursing and medicine. Both CRNAs and anesthesiologists administer anesthesia for all types of surgical procedures from the simplest to the most complex, either as single providers or together.

NURSE ANESTHETISTS IN THE MILITARY

Since the mid-19th Century, our profession of nurse anesthesia has been proud to provide anesthesia care for our past and present military personnel and their families. From the Civil War to the present day, nurse anesthetists have been the principal anesthesia providers in combat areas of every war in which the United States has been engaged.

Military nurse anesthetists have been honored and decorated by the U.S. and foreign governments for outstanding achievements, resulting from their dedication and commitment to duty and competence in managing seriously wounded casualties. In World War II, there were 17 nurse anesthetists to every one anesthesiologist. In Vietnam, the ratio of CRNAs to physician anesthesiologists was approximately 3:1. Two nurse anesthetists were killed in Vietnam and their names have been engraved on the Vietnam Memorial Wall. During the Panama strike, only CRNAs were sent with the fighting forces. Nurse anesthetists served with honor during Desert Shield and Desert Storm. Military have CRNAs provided critical anesthesia support to humanitarian missions around the globe in such places as Bosnia and Somalia. In May 2003, approximately 364 nurse anesthetists had been deployed to the Middle East for the military mission for "Operation Iraqi Freedom" and "Operation Enduring Freedom."

Data gathered from the U.S. Armed Forces anesthesia communities' reveal that CRNAs have often been the sole anesthesia providers at certain facilities, both at home and while forward deployed. For decades CRNAs have staffed ships, isolated U.S. Bases, and forward surgical teams without physician anesthesia support. The U.S. Army Joint Special Operations Command Medical Team and all Army Forward Surgical Teams are staffed solely by CRNAs. Military CRNAs have a long proud history of providing independent support and quality anesthesia care to military men and women, their families and to people from many nations who have found themselves in harm's way.

In the current mission "Operation Iraqi Freedom" CRNAs will continue to be deployed both on ships and on the ground, as well as in U.S. special operations forces. This committee must ensure that we retain and recruit CRNAs now and in the future to serve in these military overseas deployments, and to ensure the maximum readiness of America's armed services.

CRNA RETENTION AND RECRUITING—HOW THIS COMMITTEE CAN HELP THE DEFENSE DEPARTMENT

In all of the Services, maintaining adequate numbers of active duty CRNAs is of utmost concern. For several years, the number of CRNAs serving in active duty has fallen somewhat short of the number authorized by the Department of Defense (DOD). This is further complicated by strong demand for CRNAs in both the public and private sectors.

However, it is essential to understand that while there is strong demand for CRNA services in the public and private healthcare sectors, the profession of nurse anesthesia is working effectively to meet this workforce challenge. Our evidence suggests that while vacancies exist, there is not a crisis in the number of anesthesia providers. The profession of nurse anesthesia has increased its number of accredited CRNA schools, from 88 to 94 in the past year. Each CRNA school continues to turn away qualified applicants—bachelor's educated nurses who had spent at least 1 year serving in a critical care environment. Recognizing the importance of nurse anesthetists to quality healthcare, the AANA has been working with its 94 accredited schools of nurse anesthesia to increase the number of qualified graduates, and to expand the number of CRNA schools. The Council on Accreditation of Nurse Anesthesia Educational Programs (COA) reports that in 1999, our schools produced 948 new graduates. By 2004, that number had increased to 1,628, a 72 percent increase in just 5 years. The growth is expected to continue. The COA projects CRNA schools to produce 1,800 graduates in 2005.

This committee can greatly assist in the effort to attract and maintain essential numbers of nurse anesthetists in the military by their support to increase special pays.

INCENTIVE SPECIAL PAY (ISP) FOR NURSE ANESTHETISTS

According to a March 1994 study requested by the Health Policy Directorate of Health Affairs and conducted by the Department of Defense, a large pay gap existed between annual civilian and military pay in 1992. This study concluded, "this earnings gap is a major reason why the military has difficulty retaining CRNAs." In order to address this pay gap, in the fiscal year 1995 Defense Authorization bill Congress authorized the implementation of an increase in the annual Incentive Special Pay (ISP) for nurse anesthetists from \$6,000 to \$15,000 for those CRNAs no longer under service obligation to pay back their anesthesia education. Those CRNAs who remain obligated receive the \$6,000 ISP.

Both the House and Senate passed the fiscal year 2003 Defense Authorization Act Conference report, H. Rept. 107-772, which included an ISP increase to \$50,000. The report included an increase in ISP for nurse anesthetists from \$15,000 to \$50,000. There had been no change in funding level for the ISP since the increase was instituted in fiscal year 1995, while it is certain that civilian pay has continued to rise during this time. The AANA is requesting that this committee support funding increases for the ISP for all the branches of the armed services to retain and recruit CRNAs now and into the future.

In addition, there still continues to be high demand for CRNAs in the healthcare community leading to higher incomes, widening the gap in pay for CRNAs in the civilian sector compared to the military. The fiscal year 2004 AANA Membership survey measured income in the civilian sector by practice setting. The median income in a hospital setting is \$135,000, anesthesiologist group \$120,000, and self-employed CRNA \$159,000 (includes Owner/Partner of a CRNA Group). These median salaries include call pay, overtime pay, and bonus pay. These salaries are still higher than the median CRNA's salary of \$88,000 across all military service branches.

In civilian practice, all additional skills, experience, duties and responsibilities, and hours of work are compensated for monetarily. Additionally, training (tuition and continuing education), healthcare, retirement, recruitment and retention bonuses, and other benefits often equal or exceed those offered in the military.

Salaries in the civilian sector will continue to create incentives for CRNAs to separate from the military, especially at the lower grades without a competitive incentive from the military to retain CRNAs. Therefore, it is vitally important that the Incentive Special Pay (ISP) be increased to ensure the retention of CRNAs in the military.

AANA thanks this committee for its support of the annual ISP for nurse anesthetists. AANA strongly recommends the continuation and an increase in the annual funding for ISP for fiscal year 2006. The ISP recognizes the special skills and advanced education that CRNAs bring to the Department of Defense healthcare system.

BOARD CERTIFICATION PAY FOR NURSE ANESTHETISTS

Included in the fiscal year 1996 Defense Authorization bill was language authorizing the implementation of a board certification pay for certain healthcare professionals, including advanced practice nurses. AANA is highly supportive of board certification pay for all advanced practice nurses. The establishment of this type of pay for nurses recognizes that there are levels of excellence in the profession of nursing that should be recognized, just as in the medical profession. In addition, this type of pay may assist in closing the earnings gap, which may help with retention of CRNAs.

While many CRNAs have received board certification pay, there are many that remain ineligible. Since certification to practice as a CRNA does not require a specific master's degree (though all CRNAs graduating and being certified today do so as master's graduates), many nurse anesthetists have chosen to diversify their education by pursuing an advanced degree in other related fields. But CRNAs with master's degrees in education, administration, or management are not necessarily eligible for board certification pay since their graduate degrees are not in a clinical specialty. To deny a bonus to these individuals is unfair, and will certainly affect their morale as they work side-by-side with their less-experienced colleagues, who will collect a bonus for which they are not eligible. In addition, in the future this bonus will act as a financial disincentive for nurse anesthetists to diversify and broaden their horizons.

AANA encourages the Department of Defense and the respective services to reexamine the issue of awarding board certification pay only to CRNAs who have clinical master's degrees.

DOD-VA RESOURCE SHARING: DOD-VA NURSE ANESTHESIA SCHOOL UNIVERSITY OF
TEXAS HOUSTON HEALTH SCIENCE CENTER, HOUSTON, TX

The establishment of the joint Department of Defense-VA program in nurse anesthesia education at Fort Sam Houston in San Antonio, TX holds the promise of making significant improvements in the VA CRNA workforce, as well as improving retention of VA registered nurses in a cost effective manner. The current program utilizes existing resources from both the Department of Veterans Affairs Employee Incentive Scholarship Program (EISP) and VA hospitals to fund tuition, books, and salary reimbursement for student registered nurse anesthetists (SRNAs).

This VA nurse anesthesia program started in June 2004 with three openings for VA registered nurses to apply to and earn a Master of Science in Nursing (MSN) in anesthesia granted through the University of Texas Houston Health Science Center. Due to continued success and interest by VA registered nurses for the school, the program will be increasing to five openings for the June 2005 class. This program continues to attract registered nurses into VA service, by sending RNs the strong message that the VA is committed to their professional and educational advancement. The faculty director would like to expand the program to seven students for the June 2006 class. In order to achieve this goal, it is necessary for full funding of the current and future EISP to cover tuition, books, and salary reimbursement.

The 30-month program is broken down into two phases. Phase I, 12 months, is the didactic portion of the anesthesia training at the U.S. AMEDD Center and School (U.S. Army School for Nurse Anesthesia). Phase II, 18 months, is clinical practice education, in which VA facilities and their affiliates would serve as clinical practice sites. In addition to the education taking place in Texas, the agency will use VA hospitals in Augusta, Georgia, increasing Phase II sites as necessary. Similar to military CRNAs who repay their educational investment through a service obligation to the U.S. Armed Forces, graduating VA CRNAs would serve a 3-year obligation to the VA health system. Through this kind of Department of Defense-VA resource sharing, the VA will have an additional source of qualified CRNAs to meet anesthesia care staffing requirements.

At a time of increased deployments in medical military personnel, DOD-VA partnerships are a cost-effective model to fill these gaps in the military healthcare system. At Fort Sam Houston nurse anesthesia school, the VA faculty Director has covered her Army colleagues' didactic classes when they are deployed at a moments notice. This benefits both the VA and DOD to ensure the nurse anesthesia students are trained and certified in a timely manner to meet their workforce obligation to the Federal Government as anesthesia providers.

We are pleased to note that the U.S. Army Surgeon General and Dr. Michael J. Kussman, MD, MS, FACP (Department of Veterans' Affairs Acting Deputy Under Secretary for Health) approved funding to start this VA nurse anesthesia school in 2004. In addition, the Army program director COL Norma Garrett, Ph.D., CRNA with VA director Dr. Maureen Reilly, CRNA, MSN, MHS, Ph.D. working under her guidance continue to work together for the continued success in this DOD-VA partnership, with the support of Anesthesia Service Director Dr. Michael Bishop, MD. With modest levels of additional funding in the EISP, this joint DOD-VA nurse anesthesia education initiative can grow and thrive, and serve as a model for meeting other VA workforce needs, particularly in nursing.

Department of Defense and VA resource sharing programs effectively maximize government resources while improving access to healthcare for Veterans.

CONCLUSION

In conclusion, the AANA believes that the recruitment and retention of CRNAs in the armed services is of critical concern. The efforts detailed above will assist the military services in maintaining the military's ability to meet its wartime and medical mobilization through the funding both the ISP and board certification pay. Last, we commend and thank this committee for their continued support for CRNAs in the military.

Senator STEVENS. Senator Inouye.

Senator INOUE. About 2 years ago I had laser surgery in the eye and the anesthesia was administered by a nurse anesthetist. They are very good.

Dr. AUSTIN. Thank you, sir. We are very proud and very proud to serve the men and women in uniform.

Senator STEVENS. We have supported this annual funding for incentive pay. Tell us how it worked?

Dr. AUSTIN. Increasing the ceiling from the former level to the level it is now, it is a bit too soon to tell whether or not it is going to make a difference. That increased the ceiling and that ceiling then can be dealt with by the individual services to meet the needs of the services. The Army was the service that was and is most impacted and it is probably too soon to tell whether or not it is going to make a difference, but we are very optimistic that it is going to help maintain those billets.

Senator STEVENS. Let us know, because with the record of your profession's participate in the military, I think we might have to mandate its use rather than authorize its use. But tell them to keep us informed, will you, please?

Dr. AUSTIN. Thank you very much, sir.

Senator STEVENS. Thank you.

Senator INOUE. What is the national shortage of registered nurse anesthetists?

Dr. AUSTIN. Currently the national shortage, as far as a percentage, we would have to get you that data. But there continues to be a shortage. For instance, in the State of Maryland there is a hospital that has an immediate need for 11 full-time nurse anesthetists that they have not figured out by July 1 how they are going to fill. So that is a local example that really does serve as an example nationally.

The exact number, though, sir, we can get to you.

Senator INOUE. Thank you very much.

Dr. AUSTIN. I am sorry. A staff member brought up: In 2003 there is an 11 percent vacancy rate nationwide.

Senator INOUE. Thank you.

Senator STEVENS. Thank you very much.

I believe we have Jim Hoehn to testify for the Coalition of Experimental Program to Stimulate Competitive Research; is that correct?

STATEMENT OF JIM HOEHN, ON BEHALF OF THE COALITION OF EPSCoR (EXPERIMENTAL PROGRAM TO STIMULATE COMPETITIVE RESEARCH) STATES

Mr. HOEHN. Yes, Senator. Jim Hoehn.

Senator STEVENS. Hoehn, thank you very much.

Mr. HOEHN. Good afternoon, Mr. Chairman and Senator Inouye. Thank you for the opportunity to testify regarding the Department of Defense's basic science research program and the Defense Experimental Program to Stimulate Competitive Research, or DEPSCoR. I am a senior associate at the EPSCoR Idea Foundation, which is a nonprofit organization that promotes the importance of strong science and technology research infrastructure and works to improve the research competitiveness of States that have historically received less Federal research funding. Previously I spent 29 years with the National Science Foundation (NSF), the last 5 of which I was head of the EPSCoR Office at NSF, chairing the interagency coordinating committee for EPSCoR.

I speak today on behalf of the coalition of 24 EPSCoR States in support of both the Department of Defense's science and engineering research program and an important component of that pro-

gram, DEPSCoR. Mr. Chairman, we regret that some of the DEPSCoR researchers from Alaska could not be here because of the change of the date of the hearing.

Mr. Chairman and Senator Inouye, thank you for your leadership and support, which led to an increase in DEPSCoR funding in 2005. This increase was a good first step in bringing funding up to a level that will fully enable DEPSCoR researchers to offer quality research directly related to the mission of the Department of Defense. The Coalition of EPSCoR States strongly supports the Department's budget request for basic research. DEPSCoR is a small but significant part of this larger multifaceted DOD research program.

The coalition recommends that Congress appropriate \$25 million to the Department of Defense budget for the DEPSCoR program in 2006. DEPSCoR was initially authorized in the 1995 National Defense Authorization Act and was created to help build national infrastructure for research and education by funding research activities in science and engineering fields that are important to national defense. DEPSCoR's objectives are to enhance the capability of institutions of higher education in DEPSCoR States to develop, plan, and execute science and engineering research that is competitive under the merit review system used for awarding Federal research assistance; and also to increase the probability of long-term growth in competitively awarded financial assistance that DEPSCoR universities receive for research.

I would like now to briefly highlight a few DEPSCoR-funded success stories out of research projects that have and are presently contributing to our national defense interests. The University of Alaska Fairbanks Institute of Arctic Biology has conducted research on the central nervous system with potential applications for reducing the severity of combat casualties by extending the window of opportunity for transport to medical facilities.

The University of Hawaii at Manoa has developed tropical cyclone forecasts for the Joint Typhoon Warning Center, which is DOD's operational center for tropical cyclone forecasting in the Pacific and Indian Oceans.

At Montana State University, research is being conducted to protect pilots and sensors from attacks from laser weaponry. The University of Nevada researchers are working on a project to mitigate the noise in the drive systems of ships and submarines. North Dakota State University is conducting research aimed at lengthening the life of ship structures. This research, like the other research, will lead to significant savings in military spending on marine fuel, maintenance, and replacement of ships. Again, these are just a few of the examples of DEPSCoR-funded recent initiatives that are adding to our national body of knowledge on various national security issues.

DEPSCoR awards are provided to the mission-oriented individual academic investigators to conduct research that has practical military applications. However, the program as currently implemented has not taken into account the significant benefits that can be derived from pooling individual investigators' efforts into the centers of research that meet the ever-increasing challenges and needs of the Department of Defense and the services.

The DEPSCoR States propose restructuring the program into two components. The first component would retain the current structure whereby the single investigators are invited to compete for research awards in areas identified by the Department. The second component would award funding to mission-oriented centers. These centers of defense excellence would be interdisciplinary and would build defense capacity. We believe that \$25 million could be broken out for \$10 million obligated for the individual investigator awards and \$15 million for the mission-oriented centers.

In conclusion, DEPSCoR is a wise and worthwhile investment of scarce public resources and will continue to contribute research that supports national defense needs. Thank you for your consideration of this request.

Senator STEVENS. Well, I assume Senator Inouye agrees with me, if we have the money we will continue to do it. But we do not know yet. The House has knocked \$3.3 billion off. We do not know what our allocation is going to be, but assuming that we have the money to do so, we want to continue to support your programs.

Mr. HOEHN. Thank you, Mr. Chairman.

Senator STEVENS. Thank you very much.

[The statement follows:]

PREPARED STATEMENT OF DR. JEROME ODOM, DISTINGUISHED PROVOST EMERITUS, UNIVERSITY OF SOUTH CAROLINA ON BEHALF OF THE COALITION OF EPSCoR STATES

Mr. Chairman and members of the subcommittee, I thank you for the opportunity to submit this testimony regarding the Defense Department's basic scientific research program and the Defense Experimental Program to Stimulate Competitive Research (DEPSCoR).

My name is Jerome Odom. I am Distinguished Provost Emeritus and a Professor of Chemistry and Biochemistry of the University of South Carolina. I am here today to speak in support of both the Defense Department's science and engineering research program and an important component of that research, the Defense Department's Experimental Program to Stimulate Competitive Research (EPSCoR). This statement is submitted on behalf of the Coalition of EPSCoR States and the 21 States and Puerto Rico that participate in the Coalition.

Mr. Chairman and Senator Inouye, on behalf of the EPSCoR States, I want to thank the subcommittee for increasing DEPSCoR funding over the administration request for fiscal year 2005. This increase is a good first step to bringing funding up to a level that will enable researchers from EPSCoR States to offer quality research of direct benefit to the mission of the Department of Defense.

The Coalition of EPSCoR States strongly supports the Department's budget request for basic research. The Defense EPSCoR program is a small, but significant, part of this larger program. The Coalition recommends that Congress appropriate \$25 million to the Defense Department's budget for the Defense Experimental Program to Stimulate Competitive Research (Program Element PE 61114D).

EPSCoR is a research and development program that was initiated by the National Science Foundation. Through a merit review process, EPSCoR is improving our Nation's science and technology capability by funding research activities of talented researchers at universities and non-profit organizations in States that historically have not received significant Federal research and development funding. EPSCoR helps researchers, institutions, and States improve the quality of their research capabilities in order to compete more effectively for non-EPSCoR research funds. EPSCoR is a catalyst for change and is widely viewed as a "model" Federal-State partnership. EPSCoR seeks to advance and support the goals of the program through investments in four major areas: research infrastructure improvement; research cluster development and investigator-initiated research; education, career development and workforce training; and outreach and technology transfer.

The Defense Experimental Program to Stimulate Experimental Research (DEPSCoR) was initially authorized by Section 257 of the fiscal year 1995 National Defense Authorization Act (Public Law 103-337). The Defense Department's EPSCoR program helps build national infrastructure for research and education by

funding research activities in science and engineering fields important to national defense. DEPSCoR's objectives are to:

- Enhance the capabilities of institutions of higher education in eligible States to develop, plan, and execute science and engineering research that is competitive under the peer-review systems used for awarding Federal research assistance; and
- Increase the probability of long-term growth in the competitively awarded financial assistance that universities in eligible States receive from the Federal Government for science and engineering research.

The Defense EPSCoR program contributes to the States' goals of developing and enhancing their research capabilities, while simultaneously supporting the research goals of the Department of Defense. DEPSCoR grants are based on recommendations from the EPSCoR State committees and the Department's own evaluation and ranking. Research proposals are only funded if they provide the Defense Department with research in areas important to national defense. The DEPSCoR States have established an impressive record to research that has directly contributed to our Nation's security interests. If you will allow me, I would like to highlight some of DEPSCoR's success.

In my State of South Carolina, researchers from Clemson University have produced communications protocols to enhance the effectiveness of radio networks on the battlefield. Researchers are focused on the development of protocols for mitigating the limitations of radio devices of widely disparate capabilities that will be required in future tactical communication networks used by the Army. The new technique will yield a significant improvement in performance and allow for more robust radio system operation for the Army. The University of South Carolina has completed a study to help the Navy revolutionize data processing methods for battlefield operations through the use of sophisticated mathematical techniques. Funded by the Navy, the research project, carried out at the internationally recognized Industrial Mathematics Institute of the University of South Carolina, develops state of the art compression methods that can be used in a variety of military scenarios including: automated target recognition, mission planning, post battlefield assessment, intelligence and counter intelligence.

The University of Alaska Fairbanks Institute of Arctic Biology has conducted research into the central nervous system and the University's Institute of Northern Engineering and Water has conducted research into the measurement of soil moisture. Both studies have important Defense applications.

The University of Hawaii at Manoa has developed tropical cyclone forecasts for the Joint Typhoon Warning Center (JTWC), which is DOD's operational center for tropical cyclone (TC) forecasting for the Pacific and Indian Oceans. The project will develop new tropical cyclone forecasting capabilities in collaboration with the JTWC. The research is closely related to U.S. Navy research and operational needs. An important aspect of the project is to closely collaborate with the JTWC locally. This will enhance the cooperation between DOD's operational site and the State of Hawaii university research community.

University of Alabama researchers have conducted important work to reducing gearbox noise in Army helicopters. By reducing the noise levels, the crew will be more alert and able to communicate more effectively while in such a vehicle, thus improving safe operation of the rotorcraft. Additionally, reducing structural vibrations can decrease fatigue damage in the rotorcraft.

Montana State University has received funding from the Air Force conduct research into protecting pilots and sensors from attack from laser weaponry. This project is of particular interest for protecting pilots using Night Vision Goggles (NVG), for laser range finders and target designators.

University of Nevada at Reno investigators are exploring novel military applications for non-lethal weaponry for use by the Air Force. This research could be used for ultimately developing "stunning/immobilizing" weapons that do not rely on chemicals and that do not cause human injury. University of Nevada researchers are working on a project to mitigate the noise in the drive systems of ships and submarines. The mitigation of noise and the accompanying vibration will significantly improve stealth performance of naval vessels.

North Dakota State University obtained funding to develop mechanisms that allow the Navy's unmanned airborne vehicles (UAVs) to carry out mission tasks with little external supervision and control. The development of this technology will lead to individual or teams of UAVs efficiently carrying out search, surveillance, reconnaissance, and delivery of weapons missions in the presence of enemy threat and without risk to the lives of military personnel. University of North Dakota researchers received Army funding to develop weather models for improving the availability of weather information worldwide. Improvements in satellite technology research

will lead to a better forecasting tool that can be utilized by Army personnel to help maximize their advantage in a battlefield or homeland defense environment. North Dakota State obtained funding from the Navy to conduct a project to lengthen the life of ship structures. This research will lead to significant savings in military spending on marine fuel, maintenance and replacement of ships.

University of Vermont researchers conducted a study to decompose chemical warfare agents such as mustard gas in a safe and environmentally sustainable system. This method is similar to one used in industry to remove toxic compounds from the smokestacks of coal-burning plants. This process can decompose nearly 100 percent of half mustard from a gas sample. The chemical by-products of this process are environmentally friendly and non-toxic. Similar technologies can be used to decompose sarin, soman, and VX simulants.

Currently, DEPSCoR awards are provided to mission-oriented individual investigators from universities and other institutions of higher education. The individual investigators conduct extremely important research that has practical military applications. However, the program as it is currently implemented has not taken into account the significant benefits that can be derived from individual investigators pooling their efforts to provide "centers" of research that meet the ever increasing challenges and needs of the Department of Defense and the Services.

Therefore, the DEPSCoR States propose restructuring the program into two components. The first component would retain the current program whereby the individual investigators are invited to compete for research awards in areas identified by the Department and the Services. The second and new component would award funding to mission-oriented "centers." These centers of defense excellence would be mission oriented interdisciplinary areas to build defense research capacity.

To achieve important defense research objectives of both the components of the program, the DEPSCoR States need the program to be funded at \$25 million for fiscal year 2006 with approximately \$10 million obligated to the individual investigator awards and \$15 million for the mission-oriented centers initiative. This twin approach to funding will significantly enhance the Department's ability to tap into the best ideas that the DEPSCoR States have to offer in support of the Nation's security needs.

The Defense Department's Experimental Program to Stimulate Competitive Research is a wise and worthwhile investment of scarce public resources. It will continue to contribute significantly to efforts to build scientific and engineering research efforts in support of national defense needs.

Finally, the Coalition of EPSCoR States believes a \$25 million Defense EPSCoR program with the modifications suggested will ensure that Federal dollars are being used in a cost-effective way and that the EPSCoR States are contributing to the Nation's Defense efforts. Thank you for your consideration of this request.

Senator STEVENS. Next witness, Major General Paul Weaver, Juvenile Diabetes Research Foundation International.

STATEMENT OF MAJOR GENERAL PAUL A. WEAVER, JR., U.S. AIR FORCE (RETIRED), ON BEHALF OF THE JUVENILE DIABETES RESEARCH FOUNDATION INTERNATIONAL

General WEAVER. Good afternoon, sir.

Senator STEVENS. Nice to see you again.

General WEAVER. Nice seeing you both, sir.

Mr. Chairman and Senator Inouye, thank you for the opportunity to speak with you on behalf of the Juvenile Diabetes Research Foundation. I am retired Major General Paul Weaver, former Director of the Air National Guard. I am here today to report on the success and continued progress of the technologies for metabolic monitoring, also known as the Julia Weaver Fund after my 6-year-old daughter. I would also like to thank you for your past support and encourage an additional \$10 million this year for this innovative program.

Metabolic measuring research has had great successes and continuing progress as we work to understand metabolism and the lifesaving insight new technologies can provide for our warfighting men and women. Metabolic measuring truly holds the potential to

improve and save lives. It will give our troops an immediate advantage when the unthinkable occurs.

I ask you to imagine for a moment this all too real and common scenario. A soldier is wounded by an Iraqi insurgent mortar attack. With this technology's remote real-time capacity to provide an on-line window into the body, monitoring metabolic alterations, field surgeons will have the potential to immediately assess the extent of the soldier's injuries. Ultimately, metabolic measuring can be integrated with other automated medical devices and Objective Force warrior equipment, activating devices such as the automatic tourniquets or injections to respond appropriately to injuries even before medical help arrives.

This amazing technology will ultimately allow soldiers to wear a uniform that will actually provide treatment on the spot. In the critical moments after an injury, metabolic measuring could treat injuries and give doctors at a field hospital miles away information to prepare for a soldier's specific wounds.

While the possibility of such lifesaving measures through technologies from metabolic measuring is still on the horizon, we are moving closer and closer to this reality every day. Already there are excellent examples of metabolic measuring funded research like a gel that responds to the concentration of glucose in your tears by changing colors, allowing soldiers to survive and recover from injuries, making our armed forces stronger.

In essence, metabolic measuring research will provide a real-time access to the warfighter's metabolic state, improved health and life-saving measures for women and men in the military. Access to the soldier's real-time metabolic state will have an enormous impact, sir. The technology will enhance our knowledge of basic metabolism, enabling the military to tailor fundamental elements of training and nutrition and ultimately be able to tailor their medical care to not only improve their survival, but, almost as important, reduce their healing time and the long-term effects of their injuries.

Congress' investment in this innovative technology and progressive approach has been vital to our national security and national health. A continued investment in this program will enable technologies for metabolic measuring partners, such as the Department of Defense, the NIH, NASA, and Juvenile Diabetes Research Foundation, to continue to develop and improve technologies to measure the physiology and the viability of our fighting men and women accurately, consistently, and non-evasively.

I have seen firsthand the fruits of your investment: Velcro, global positioning system (GPS), and the Internet. With funding through your subcommittee, technologies for metabolic measuring has the potential to be this kind of innovative and even lifesaving tool.

It is critical for your support of this lifesaving research by funding \$10 million for technologies for metabolic measuring, the Julia Weaver Fund Initiative. Not only will this improve the lives of our soldiers and their families, but it will be a great step toward an even more personal wish for me and many families, a cure for juvenile diabetes. Giving my daughter even the possibility of a non-invasive option to her multiple shots each day and the potential of avoiding the devastating complications of diabetes, like blindness,

kidney failure, and heart disease are promises that would provide hope to so many suffering with juvenile diabetes.

Finally, sir, my son Brett is an 18 year old marine headed to Iraq. Please give him and all the men and women like him who are already there in the front lines absolutely the best chance to survive if the unthinkable occurs.

Thank you for your time and your support, sir.

Senator STEVENS. Thank you very much. The best to your son.

General WEAVER. Thank you, sir.

Senator STEVENS. Nice to see you again.

General WEAVER. Nice seeing you, sir.

Senator STEVENS. Do you have a question, Senator?

Senator INOUE. We will do our best.

[The statement follows:]

PREPARED STATEMENT OF MAJOR GENERAL PAUL A. WEAVER, JR. (RET.)

PROGRAM OVERVIEW

Mr. Chairman and members of the subcommittee, thank you for the opportunity to appear before you today to support \$10 million in funding for the Technologies for Metabolic Monitoring/Julia Weaver Fund (TMM/JWF) Initiative on behalf of the Juvenile Diabetes Research Foundation International.

I am here to report on the great success and continued progress of the TMM program thanks to your past support of this innovative project. The TMM program is working to improve understanding of metabolism and subsequently develop monitoring technology to provide our military with critical information about the physiology and viability of soldiers in the field, and astronauts orbiting the earth, accurately, constantly and non-invasively. The real life application of this technology will offer healthcare professionals an online window into the body; information which can ultimately provide life saving insight.

I am pleased to report that Congress's investment in this inventive technology and progressive approach to a vital national security, as well as national health need since fiscal year 2001, has yielded remarkable successes. We come before you this year to request an additional \$10 million to elevate this research, and move it rapidly to the soldiers in the field who will benefit the most from the results of this exciting program. A continued investment in the program will enable TMM's partners—the Department of Defense, the National Institutes of Health and the National Aeronautics and Space Agency, as well as the Juvenile Diabetes Research Foundation and the many TMM participants from academia, industry and government—to continue to develop and improve technologies to measure the physiology and viability of our fighting men and women.

After 35 years of military service, including 8 years as the Director and Deputy Director of the Air National Guard, I am proud of the Department of Defense's long and distinguished tradition of funding research, driven by genuine mission necessity. While in uniform, I saw the benefits of your commitment to the brave who serve. As an American out of uniform, I know that the fruits of your investments yield some of the most used applications in American culture. Some items on this list are part of our American lexicon—Velcro, GPS and the Internet. The program I speak of today has the potential to join this list, but it won't just make lives easier, it has the potential to improve and save lives as well.

A CRITICAL BATTLEFIELD TOOL

As we know all too well from the fields of Iraq and Afghanistan, providing our military's medical units with the most sophisticated cutting edge technology has significantly improved their ability to tackle battlefield trauma, ultimately saving the lives of our fighting men and women. Our soldiers, sailors, airmen and marines wounded in Iraq, Afghanistan and elsewhere are much more likely to survive their injuries today than in past wars. As recently reported by the Army News Service, only 1.6 percent of soldiers injured in Operation Iraqi Freedom and Operation Enduring Freedom have died of their wounds. This is less than half the 3.68 percent death rate for wounded soldiers in Vietnam. The technologies developed by the TMM program will accelerate this trend.

TMM will provide our soldiers with an immediate advantage when the worst occurs. Imagine the following all too real and common scenario: A soldier is wounded

by an Iraqi insurgency's mortar attack. With the technology's remote real time capacity to monitor metabolic alterations, field surgeons will have the potential to assess the extent of his injuries in such an acute incident. TMM can be integrated with other automated medical devices in Objective Force Warrior equipment, activating devices such as automatic tourniquets or injections to respond appropriately to his injuries. "Knowledge of the metabolic status of the warfighter, both prior to injury and during treatment, is vital to providing medical care. While in the past there have been numerous individual programs addressing various aspects of telemetry and metabolic monitoring, TMM has finally provided the opportunity to look at the whole issue end to end. We are especially excited about the opportunity to work more closely with our colleagues in NASA and NIH using the TMM program as a framework," said Colonel John Holcomb, Commander, U.S. Army Institute of Surgical Research. It is this capability that will potentially have a truly dramatic impact on reduction of our died-of-wounds numbers, not to mention ultimately improving the long-term quality of life, as well as reducing the cost of our military's medical obligations to its veterans.

TMM sensors also will have the potential to measure a soldier's metabolism in response to exertion, particularly in an environment of extreme heat. In another real scenario, this technology could direct an over-exerted soldier to take actions to optimize his performance, such as when and how much fluid to drink, or to consume a MRE specially formulated to optimize his performance for the task at hand. The sensors could also inform his commander that the soldier is too exhausted to make good decisions, protecting not only him but also the mission.

Access to a soldier's real time metabolic state will have enormous impact. The technology will enhance our knowledge of basic metabolism, enabling the military to tailor fundamental elements of training, nutrition and soldier health and performance, and ultimately be able to tailor their medical care to not only improve their survival, but almost as important reduce their healing time and the long term effects of their injuries. Saving the warfighters life is of tantamount importance, but we must also reduce the impact of their injuries on the rest of their lives.

According to Dr. Frazier Glenn, Technical Director, U.S. Army Medical Research and Materiel Command at Fort Detrick, "current technology investments have been somewhat divergent and the overall metabolic research area needed some way to coalesce around a central effort. TMM has fulfilled that role admirably." As a result, the DOD research in this area is even more effective, with the assistance of the TMM program.

A STRONG INVESTMENT WITH DEMONSTRABLE RESULTS

To demonstrate this program's dramatic success in the 5 years since its inception, in fiscal year 2001 the U.S. Army Medical Research and Materiel Command (USAMRMC), which manages this initiative, received 16 applications and supported 5 novel metabolic monitoring research projects and a highly successful workshop. In fiscal year 2002, the program received \$2.5 million in appropriations and was expanded to include academic, industry, civilian and defense researchers. As a result, 48 applications were received and following a highly competitive review, an additional 12 novel metabolic monitoring research projects received seed grants for 1 year. This year we have received nearly 60 proposals that have been reviewed by an expert scientific panel. The work of previously funded TMM researchers is among the highest scoring submissions. As this program continues to progress with the addition of an intramural component, we will utilize highly skilled laboratories with unique complementary skills, such a high-powered computer models of human disease, to realize the potential of these technologies to the benefit of both soldiers and civilians.

A critical component of the success of this project has been a structure which emphasized and encouraged innovative thinking. Fostering such an atmosphere resulted in new discoveries, some of which built upon existing ideas, and others which took this promising research in bold new directions. As a result of our continued combined effort, the TMM program has brought several highly attractive technologies from the drawing board to successful laboratory and field demonstrations.

Some of the intriguing examples of TMM-funded research include a polyacrylamide gel technology that responds to changes in the concentration of glucose in tear fluid by changing color—a high-tech contact lens if you will. In another project, researchers developed miniaturized implantable sensors, one of which wirelessly transmits glucose concentrations, and another measures multiple metabolites. Other projects included the development and validation of several portable devices to monitor the energy expended during physical activity, and determine the general energy costs of physical training in ROTC cadets.

Now, it is time to build upon this investment. The TMM program is ready to begin to transition from a basic research focus to a development and implementation process in order to expedite the clinical application of technology sooner. We hope not only to continue the current exciting direction of the program, but also to have the resources to begin to expand and truly maximize some of our real successes.

In addition to the work we have been doing, in partnership with DOD, NASA and NIH's academic and industrial partners in all 50 States, we hope to refine, manufacture and begin testing these technologies so they may rapidly enter the developmental and approval pipeline. Our goal is to create centrally organized programs that can utilize the strengths of the many facilities that can support this effort. This will be done in addition to our continued efforts to ensure a constant supply of new and novel capabilities.

PROGRAMMATIC SUCCESS WILL HAVE A BROAD REACH

There is no question that TMM holds great promise and is a superb investment for our soldiers in the field. Just like numerous other Defense Department programs before it, this technology teems with potential for those out of uniform.

As a military man, I am optimistic about the real life application of this technology for our fighting men and women, but I must be honest that my real passion for this research is my daughter Julia. One month after my retirement from military service, my wife and I took our 2½-year-old daughter Julia to the emergency room at Mary Washington Hospital in Fredericksburg, Virginia, a day that truly changed our lives. Prior to that day, we had been told Julia had the flu. Her condition continued to worsen. On New Years Day morning, we noticed a severe degradation with her overall health. She lost 10 pounds in 1 week and was losing mental awareness of her surroundings. We proceeded to the emergency room at Mary Washington Hospital where we were told, after her blood was tested, that she had developed juvenile diabetes. Julia, whom we call "The Precious", was transported by a helicopter ambulance to the Pediatric Intensive Care Unit at Walter Reed Army Medical Center. As the chopper lifted off, I could never explain the feeling in our hearts that we may never see our little girl alive again.

She was in the Intensive Care Ward for approximately 2 days and then moved to a regular ward after her condition became stable. The great medical staff at Walter Reed saved her life and for that, my wife and I will be eternally grateful. My daughter's daily regimen with juvenile diabetes consists of having her finger pricked 6-8 times a day and receiving 2-4 shots a day. I made a commitment to God that if I could ever do anything to help find a cure for diabetes, I would do it.

THE PROMISE FOR DIABETES

What you must know about the promise of this research effort as it applies to diabetes is that it offers more than an improvement in a diabetic's quality of life. As a parent, the simple act of eliminating the daily regimen of the 6 to 8 finger pricks and 2 to 4 shots my daughter endures would be a great relief. TMM offers the potential to replace this painful routine and provide a more complete picture of the disease. The real benefit of TMM is its ability to greatly reduce—or ideally eliminate—the daily risk of the diabetic emergencies of hypoglycemia and hyperglycemia, and most significantly, the long term damage caused by the fluctuations in blood glucose. JDRF reports that on average, the life expectancy of a child with type 1 diabetes is shortened by 15 years because of this long-term damage. As Julia's father, this is a statistic I cannot accept.

Anyone who has a loved one with this disease, or has the disease him or herself, knows the difficulties of controlling ever-fluctuating glucose levels with insulin and diet. Current technology is good but it is extremely difficult to maintain tight control of blood glucose levels, especially over long periods of time. New and improved technologies would help to ward off the devastating complications, such as blindness, kidney failure, amputation, heart disease, and nerve damage, which are often the inevitable result of a lifetime with this disease.

Technologies that would non-invasively monitor a diabetic's metabolism, coupled with an ability to provide information remotely (or wirelessly), would allow individuals with the disease to monitor their blood sugar levels accurately, constantly, and non-invasively, which could ultimately improve the control of fluctuations in their blood glucose levels and potentially reduce the severity of debilitating complications. In this way, this technology could offer a significant and immediate improvement in the quality of life of 18 million Americans who suffer from this disease and relieve much of the economic burden of this disease on our Nation.

APPLICATION IN THE INTENSIVE CARE UNIT

Insulin resistance and hyperglycemia often accompany the critical injuries and illnesses of patients in the intensive care unit (ICU), placing them at high risk for multiple organ failure and death. TMM could have a profound impact for these people as well. Recent studies show that preventing hyperglycemia by maintaining insulin levels substantially improves outcomes for these critically ill patients. TMM holds the potential to improve glycemic control in injured soldiers and other ICU patients that could ultimately be implemented in every hospital's intensive care unit, saving countless lives.

CONCLUSION

JDRF and I thank you Mr. Chairman and members of the subcommittee for your generous funding of this program, which allowed it to prosper into a unique and successful initiative. The attached research summaries demonstrate the high level of innovation that has been pursued with these funds. I respectfully ask that you continue your strong support for this initiative by providing \$10 million for fiscal year 2006. This funding will allow the U.S. Army Medical Research and Materiel Command (USAMRMC), in combination with its partners at NASA, the NIH and JDRF to capitalize on the opportunities provided by the previous 5 years of funding. Such funding will enable this truly unconventional consortium to expand this initiative, and transition from development to evaluation and application of these novel technologies in soldiers in the field and patients in the clinic.

This subcommittee is faced with difficult choices as it looks to stretch limited resources in a way that makes our military more lethal, robust and sustaining. I urge you to recognize the promise of this program to protect our most valuable asset, the men and women in uniform, when they need it most, which is following an injury. The science and technology in the TMM initiative is real; it holds the promise to assist wounded warriors immediately in times of trauma, and to optimize war fighter performance when it is most needed. While the health care cost savings it offers are significant, the cost of the lives, and the improvement in their quality, is truly incalculable.

I thank you for the opportunity to appear before you today.

TMM/JWF PROGRAM SUCCESSES

Development of a mouse/mammalian model for test and validation of implantable glucose sensors. This is vital to allow the progress of implantable research to move forward. TMM allowed this vital base-line infrastructure work to occur that will have wide ranging impact on many technology and research efforts that would not have been nearly as effective without it.

Numerous papers and research into Iontophoresis and other non-invasive/minimally invasive techniques of analysis and extraction of glucose and other analytes for assessment of metabolism.

Acceleration of research in implantable sensors to apply to numerous applications, including glucose monitoring. TMM allowed significant forward movement and acceleration in various industrial programs leading to earlier commercialization, and thereby more rapid move to the public of new techniques and devices.

TMM initiative has sharpened the focus and galvanizing the relevant research and development community in developing techniques for continuous monitoring of metabolic status in day-to-day activities, vital data to determine the effectiveness of new sensors and systems. This has led to seminal publications in peer-reviewed scientific journals to establish the technical foundations and, in conjunction with industrial collaborators, the beginnings of translation of the technology from the university research lab to the hands of the public. As a result of TMM, there are clear prospects for novel implantable sensors that can be of use in a variety of metabolic monitoring situations in the next several years.

TMM allowed the development and validation of several portable techniques for monitoring the amount of physical activity and its associated energy expenditure, and to determine the general energy costs of physical training in ROTC cadets. The TMM program has successfully completed tests in April of 2004, and is in the active process of analyzing the abundant data that was ascertained.

TMM funded research toward developing and characterizing a minimally invasive near-infrared fluorescence affinity glucose sensor for transdermal monitoring of subdermal interstitial fluid in diabetics and soldiers (fitness control). TMM allowed the successful completion of the optimization of a sensor in-vitro under simulated body conditions. The excellent long-term stability data of the TMM sensor, which performed satisfactorily over a period of 6 months on the benchtop, can be considered

to be a scientific breakthrough in the field of optical affinity sensors for glucose monitoring.

TMM INVESTIGATORS—BRIEF PROJECT SUMMARIES 2004

Sanford Asher, Ph.D.—University of Pittsburgh, Department of Chemistry.—(a) Novel Approaches to Glucose Sensing Based on Polymerized Crystalline Colloidal Array Hydrogel Sensors; (b) Fabricate superparamagnetic particle hydrogels responsive to glucose which will report on the interstitial glucose concentration noninvasively through a magneto-acoustic response; (c) Interstitial measurement; (d) Implantable; (e) Particles will have a natural frequency of oscillation which is glucose dependent; (f) Oscillating particles will generate an ultrasonic acoustic response which we detect by a piezoelectric transducer.

Ralph Ballerstadt, Ph.D., Biotex, Inc.—(a) Implantable Fluorescence Sensor For in vivo Glucose Monitoring; (b) Fluorescent properties of the sensor will vary in response to local glucose concentrations.

Diane J. Burgess, Ph.D.—University of Connecticut.—(a) Miniaturized, Wireless, Implantable Glucose Sensors; (b) With the help of fiscal year 2002 TMM-support: assembled an interdisciplinary team who designed, built and tested various components of a miniaturized, wireless-integrated and totally-implantable glucose sensor; (c) Development of an advanced hydrogel coating containing tissue response modifiers (TRMs) capable of minimizing inflammation, preventing fibrous encapsulation and promoting neovascularization; (d) Glucose-oxidase technology; (e) Implanted, wireless technology.

Matthew R. Glucksberg, Ph.D.—Northwestern University.—(a) Surface-Enhanced Raman Spectroscopy for Monitoring Lactate and Glucose; (b) Raman spectroscopy: powerful analytical tool that permits the unambiguous identification of molecules based on their unique vibrational modes; (c) Surface Enhanced Raman Scattering (SERS) phenomenon increases by up to a trillion fold the Raman signal from molecules near gold and silver nanoscale materials; (d) Project aims to develop and test these SERS active substrates on the tip of an indwelling, percutaneously implanted fiber optic probe.

Krzysztof C. Kwiakowski, Ph.D.—Lynntech, Inc.—(a) A New Non-Invasive Continuous Glucose Sensor; (b) Micro-needle arrays created by Lawrence Livermore National Laboratory (LLNL) as the basis for a glucose sensor; (c) Interstitial fluid glucose measurement; (d) Similar to CGMS, but with new micro-needle technology.

Joseph Y. Lucisano, Ph.D.—GlySens, Inc.—(a) Dependable Detection and Warning of Hypoglycemia; (b) A very small, sensor array that can be inserted through a needle into the subcutaneous tissues of healthy individuals and that can be retrieved after 2 weeks of intensive monitoring; (c) A larger, disc-shaped version of the sensor array for long-term (1 year) implantation, especially in diabetic children to detect and warn of hypoglycemia; (d) Sensors indicative of the metabolic state, including sensors for glucose, oxygen, lactate, temperature, heart rate, breathing rate and physical activity.

Michael Pishko—Penn State, Dept Chemical Engineering.—(a) Microfabricated Multianalyte Sensor Arrays for Metabolic Monitoring; (b) Electrochemical biosensors based on redox polymer/enzyme thin films fabricated using conventional wafer fabrication technologies; (c) Implantable.

J. Bruce Pitner, Ph.D.—Becton, Dickinson and Company.—(a) Real-Time Energy Metabolite Monitoring Developing in vivo Sensors for Glucose, Fatty Acids, and Lactate; (b) Fluorophore-labeled binding proteins specific to metabolites such as glucose, lactate, and fatty acids; (c) Fluorophores are located at the binding site of the protein. Upon ligand attachment, the binding site undergoes conformational changes, which causes changes of the fluorescence response of the labeled dye.

Leah Tolsa, Ph.D.—University of Maryland Baltimore County.—(a) Low-Cost Portable System for Multianalyte Metabolic Monitoring; (b) Specific binding of each analyte to a corresponding binding protein. A sample of set volume is pumped into a microfluidic cassette, diluted accordingly, and channeled into three chambers containing the protein biosensors; (c) Proteins will be labeled with an environment-sensitive fluorophore (acrylodan) at a site that responds to analyte binding.

2003

Tadeusz M. Drzewiecki, Ph.D.—Defense Research Technologies, Inc.—(a) Non-Invasive Metabolic Monitoring Using a Breath-by-Breath Microfluidic Gas Monitoring System.

Jeffrey I. Joseph, D.O.—Thomas Jefferson University.—(a) Artificial Pancreas for Control of BG and Insulin Levels in Hospitalized Patients with Diabetes and Stress

Hyperglycemia; (b) MiniMed technologies—with inclusion of 3 rather than 1 sensor and intravenous monitoring.

Thomas Joseph—Becton Dickinson Technologies.—(a) Indwelling Metabolite Sensors for Optical Reading Through Skin: A Platform Based on NIR Dyes Conjugated to Binding Proteins: NIR Fluorescent Dyes conjugated to binding proteins.

David Gough—University of California, San Diego.—(a) Implementation of Implantable Disc, long-lived lactate sensor, monitor heart and breathing into animal models.

Donald Kreutzer—University of Connecticut.—(a) Uses of Neovascularization to Enhance Glucose Sensor Function In Vivo: Local delivery of angiogenic factors to enhance glucose sensor function; (b) Role of Macrophages in the Function and Lifespan of Glucose Sensors In Vivo.

Michael J. McShane, Ph.D.—Louisiana Tech University.—(a) Novel Micro/Nano Approaches for Glucose Measurement Using pH-Sensitive Hydrogels: pH-sensitive microgels for glucose measurement.

Jackie Y. Ying, Ph.D.—Massachusetts Institute of Technology.—(a) Glucose-Responsive Nanoparticles for Controlled Insulin Delivery.

2002

Daniel Moran, Institute of Military Physiology, Israel.—(a) Non-invasive metabolic rate monitor and predict energy expenditure.

Kong Chen, Vanderbilt University Medical Center.—(a) Non-invasive physical activity monitor, predict energy expenditure, determine energy costs and physiological responses.

Richard Guy, University of Geneva, Switzerland.—(a) Transdermal ionophoretic metabolic monitoring.

Ralph Ballerstadt, Biotex, Inc.—(a) Minimally invasive nearIR fluorescent polymer sensor for transdermal glucose monitoring.

Diane Burgess, University of Connecticut.—(a) Autonomous sensory device, low-power CMOS microelectronics, glucose oxidase based, improved stability via coatings.

David Gough, University of California, San Diego.—(a) Implantable Disc, multi-sensor array.

Stuart Harshbarger, Johns Hopkins University.—(a) Metabolic activity at wound site, prediction of wound healing.

James Mansfield, Hypermed, Inc., Watertown MA.—(a) Hyperspectral Imaging, focal changes in cutaneous hemoglobin.

Bradley Nindl, Military Performance, U.S. Army Research Institute of Environmental Medicine, Natick, Massachusetts.—(a) Non-invasive IGF-1 monitoring during warfighter training, interstitial micropore measurement.

Kenneth W. Ward, iSense Corporation.—(a) 300 m wire sensor for continuous amperometric monitoring of glucose and lactose.

Babak Ziaie, U. of Minnesota.—(a) Hydrogel-based implantable micromachined transponder for wireless glucose measurement.

2001

Jerome Shultz, NASA-AMES Research Center.—(a) Non-invasive, physiological evaluation system.

Bradley Nindl, Military Performance, U.S. Army Research Institute of Environmental Medicine.—(a) IGF-1 and IGF-1R analysis—Filter Paper Spot Assay.

Amanda O'Donnell, Naval Aerospace Medical Research Laboratory.—(a) Telemetric Device, heart rate variability, non-invasive assessment of operational performance.

Kaveh Zamani, Medical Research and Materiel Command.—(a) Real-time stress monitoring, non-invasive, stress hormone.

Motilal Pamanani, Henry M. Jackson Foundation for the Advancement of Military Medicine.—(a) Interstitial vs. Intravascular changes in hemorrhagic shock.

Senator STEVENS. Our next witness, Dr. Harry Armen, President of the American Association of Mechanical Engineers. Yes, sir.

STATEMENT OF HARRY ARMEN, Ph.D., PRESIDENT, AMERICAN SOCIETY OF MECHANICAL ENGINEERS

Dr. ARMEN. Good afternoon, Mr. Chairman, Senator Inouye. I am Harry Armen and I serve as the elected President of the American Society of Mechanical Engineers (ASME), a 120,000-member pro-

fessional engineering society founded in 1880. I am an engineer with over 40 years of experience in defense aerospace.

Engineers are a major part of this Nation's technology base, a base that is essential for defense and for our economic vitality. We therefore appreciate the opportunity to appear before your subcommittee to present our views on the DOD science, engineering, and technology programs, the S&T programs.

I want to specifically thank the subcommittee and especially you, Mr. Chairman and Senator Inouye, for your past and ongoing support you have shown for these programs. A stated goal of this administration and Congress is to maintain defense S&T funding at 3 percent of the overall defense budget. That level would require \$13.4 billion for fiscal year 2006. We urge you to support this level of funding for the S&T programs.

While we appreciate your continued support for the overall program, we remain very concerned about critical shortages in specific DOD S&T areas, particularly in those that support basic research, the 6.1 account. And we are concerned about the trends for funding for scientific and technical education. Basic research supports science and engineering research and technical education at universities in all 50 States. Many of the technically talented engineers who have developed and are developing our current weapons systems received funding for their education as a result of working on basic research projects and other programs funded by DOD that promoted technical education. On a personal level, I am a product of the National Defense Education Act of 1961.

In the early 1980s basic research was 20 percent of S&T funding. That level has declined to 12 percent. The technological superiority our young men and women in the services have been given in the campaigns in Afghanistan and Iraq were a direct result of investments made in science and technology several decades ago. We strongly encourage this subcommittee to reverse the declining trend and support robust investment in basic research.

We also urge the members of the subcommittee to support advanced technical education. As the need for a more highly skilled workforce which includes a higher percentage of individuals with master's and doctoral degrees increases and the available technical workforce decreases, corporations that must hire engineers who are U.S. citizens and have appropriate security clearances will be faced with critical shortages.

These shortages are a result of our own students declining to pursue careers in engineering and science, compounded by the fact that almost 60 percent of the current civilian science and technology defense workforce will be eligible for retirement or early retirement within the next 5 years.

Mr. Chairman and members of the subcommittee, we have a serious problem. The questions that must be addressed are the following: Will the United States, which is now dependent upon foreign suppliers for our energy and foreign financial resources to underwrite our deficits, also be dependent on foreign sources for science and engineering knowledge?

The second question: Will this Nation be the leader or just an observer in the next technological revolution, involving the confluence of bio, nano, and information technologies? That confluence will re-

sult in remarkable breakthroughs that will alter virtually every aspect of our lives. Or as Al Jolson once said, "You ain't seen nothing yet."

In summary, I urge the members of the subcommittee to continue your support to strengthen DOD's science and tech programs. It will take a great deal of continued attention and a commitment to defense research and development (R&D) to ensure that the best engineering and scientific minds are once again willing to apply their talents to meeting the future defense needs of this Nation.

Thank you for the opportunity to present our views.

Senator STEVENS. Well, thank you very much, doctor. We are pleased to have you appear before us.

Senator Inouye?

Senator INOUE. Thank you.

Senator STEVENS. We appreciate your comments. Thank you.

Dr. ARMEN. Thank you.

[The statement follows:]

PREPARED STATEMENT OF HARRY ARMEN

Mr. Chairman and distinguished members of the subcommittee, the ASME Department of Defense (DOD) Task Force of the Committee on Federal Research and Development is pleased to comment on the fiscal year 2006 budget request for the Research, Development, Test and Evaluation (RDT&E) and the Science and Technology (S&T) portion of the Department of Defense budget request.

ASME is a nonprofit, worldwide engineering Society serving a membership of 120,000. It conducts one of the world's largest technical publishing operations, holds more than 30 technical conferences and 200 professional development courses each year, and sets many industrial and manufacturing standards. The work of the Society is performed by its member-elected Board of Governors through five Councils, 44 Boards, and hundreds of Committees operating in 13 regions throughout the world.

This task force is comprised of experts from universities, industry, and members from the engineering and scientific community who contribute their time and expertise to evaluate the budgets requests and legislative initiatives the DOD sends to Congress.

We appreciate the opportunity to provide input on these areas that are critical to the national security and economic vitality of the United States. This subcommittee under your leadership has shown strong support for maintaining growth in Defense Research and Engineering in general and more specifically in Defense Science and Technology funding. We understand that Congress is faced with a more highly constrained budget environment this year and that there are many areas where increased funding could provide benefits. However, these Science and Technology accounts not only contribute directly to national security by creating the technology that will be inserted into our next generation of weapon systems, they also contribute through direct benefits, such as workforce development, job creation, and economic growth which are also vital to a strong national defense.

Our testimony addresses three primary funding areas: overall Engineering (RDT&E); Science and Technology (S&T); and the University Research Initiative (URI). In addition, the consequences of inadequate funding for defense research are outlined. These include a degraded competitive position in developing advanced military technology versus potential peer competitors. This could have profound consequences to the United States' economic and military position in the world.

The fiscal year 2006 request, if implemented, would represent a significantly reduced investment in Defense S&T. We strongly urge this committee to consider additional resources to maintain stable funding in the S&T portion of the DOD budget. At a minimum, \$13.4 billion, or about \$2.9 billion above the President's Request is required just to maintain inflation adjusted level funding.

DOD REQUEST FOR RDT&E

The administration requested \$69.356 billion for the Research, Development, Test and Evaluation (RDT&E) portion of the fiscal year 2006 DOD budget. These resources are used mostly for developing, demonstrating, and testing weapon systems, such as fighter aircraft, satellites, and warships. This amount represents growth

from last year's appropriated amount of \$69.199 billion of about 0.2 percent. Therefore, when adjusted for inflation, this represents a reduction of about 2 percent in real terms. One of the largest percentage cuts is in the Operational Test and Evaluation (OT&E) function, where the proposed funding of \$168 million is little more than half of the 2005 appropriated amount of \$310 million. The OT&E organization and the testing it conducts was mandated by Congress, and is intended to insure that weapon systems are thoroughly tested so that they are effective and safe for our troops.

While this testimony focuses on the fiscal year 2006 budget, the task force notes that the multi-year spending plan, as provided in the Future Years Defense Program (FYDP), generally shows reduced spending in RDT&E accounts over the next 5 years, with spending in fiscal year 2011 being just \$59.7 billion, or a 14 percent reduction from current levels. This reduced spending in R&D is inconsistent with the goal of developing new systems with advanced capabilities that support military transformation.

In recent years, the task force has supported the overall RDT&E request. However, this request falls short in meeting requirements and hence we request that the top line RDT&E be increased to \$73.1 billion. The specific areas that most need augmentation will be addressed in subsequent sections. While no specific recommendation on OT&E funding is provided, the committee should consider the level of funding required to ensure that the approximately \$70 billion worth of weapon systems that the Department is procuring are adequately tested and shown to be safe and effective.

DOD REQUEST FOR SCIENCE AND TECHNOLOGY

The fiscal year 2006 budget request for Defense Science and Technology (S&T) is \$10.522 billion, which is \$2.549 billion less than the fiscal year 2005 appropriated amount of \$13.069 and represents a 19.5 percent reduction. The S&T portion of overall DOD spending of \$419 billion would fall to 2.5 percent with this request. The 2001 Quadrennial Defense Review (QDR), the Defense Science Board (DSB), as well as senior Defense Department officials and commanders from the Air Force, Army, and Navy have voiced strong support for the future allocation of at least 3 percent for S&T programs. Clearly, this budget request moves the country in the wrong direction, by reducing S&T funding.

A relatively small fraction of the RDT&E budget is allocated for S&T programs. Specifically, the S&T request for \$10.522 billion represents only about 15 percent of the RDT&E total, but these accounts support all of the new knowledge creation, invention and technology developments for the military. These S&T funds support Basic Research (6.1), Applied Research (6.2), and Advanced Technology Development (6.3) and all categories are programmed for significant funding reductions.

Basic Research (6.1) accounts would decrease from \$1.513 billion to \$1.318 billion, a 12.9 percent decline. While these basic research accounts comprise less than 12 percent of the S&T budget and less than 2 percent of the RDT&E total, the programs that these accounts support are critically important to fundamental, scientific advances and to the generation of a highly skilled science and engineering workforce.

Basic research accounts are used mostly to support science and engineering research and graduate, technical education at universities in all 50 States. Almost all of the current high-technology weapon systems, from laser-guided, precision weapons, to the global positioning satellite (GPS) system, have their origin in fundamental discoveries generated in these defense-oriented, basic research programs. Proper investments in basic research are needed now, so that the fundamental scientific results will be available to create innovative solutions for the future defense needs of this country. Many of the technical leaders in corporations and government laboratories that are developing current weapon systems, such as the F-22 and Joint Strike Fighter, were educated under basic research programs funded by DOD. Failure to invest sufficient resources in basic, defense-oriented research will reduce innovation and weaken the future scientific and engineering workforce. The Task Force recommends that Basic Research (6.1) be funded at the level of \$1.6 billion.

Applied Research (6.2) would be reduced from \$4.849 billion to \$4.139 billion, a 14.6 percent reduction. The programs supported by these accounts are generally intended to take basic scientific knowledge, perhaps phenomena discovered under the basic research programs, and apply them to important defense needs. These programs may involve laboratory proof-of-concept and are generally conducted at universities, government laboratories, or by small businesses. Many of the successful demonstrations create or foster small companies, such as those done in the Small Business Innovative Research (SBIR) programs. Some devices created in these de-

fense technology programs have dual use, such as GPS, and the commercial market far exceeds the defense market. Many small companies that fuel job growth in many states obtained their start in defense programs, but later broadened their markets. However, without initial support many of these companies would not exist. Failure to properly invest in applied research would prevent many ideas for devices from being tested in the laboratory, and would stunt the creation and growth of small entrepreneurial companies.

The largest reduction would occur in Advanced Technology Development (6.3), which would experience a 24.5 percent decline, from \$6.707 billion to \$5.046 billion. These resources support programs that develop technology to the point that they are ready to be transitioned into weapon systems. Without the real system level demonstrations funded by these accounts, companies are reluctant to incorporate new technologies into weapon systems programs. The individual service's S&T accounts reflect the general trend of large reductions described above. However the largest reductions are in the Army's accounts, where Basic Research would be cut by 21.6 percent, Applied Research by 39.9 percent, and Advanced Technology Development by 45.4 percent. The only major S&T component with an increase is "Defense-Wide" Applied Research (6.2) where a 2.8 percent increase is proposed, mainly due to a 3.6 percent increase for the Defense Advanced Research Projects Agency (DARPA), an increase we strongly endorse.

We urge this subcommittee to support an appropriation of \$13.4 billion for S&T programs, which is 3 percent of the overall fiscal year 2005 DOD budget. This request is consistent with recommendations contained in the Quadrennial Defense Review and made by the Defense Science Board (DSB), as well as senior Defense Department officials and commanders from the Air Force, Army, and Navy, who have voiced support for the future allocation of 3 percent as a worthy benchmark for science and technology programs.

DOD REQUEST FOR THE UNIVERSITY RESEARCH INITIATIVE (URI)

The University Research Initiative (URI) supports graduate education in Mathematics, Science, and Engineering and would see a \$46.1 million decrease from \$294.2 million in fiscal year 2005 to \$248.1 million next year, a 15.7 percent reduction. While these amounts are small in comparison with the overall defense budget, they are critical to educating the next generation of engineers and scientist for the defense industry. Lack of funding for the URI will prevent or discourage students from pursuing careers in defense related technologies. This will have a serious long-term negative consequence on the ability of companies to hire highly skilled scientific and engineering workforce to build weapons systems in the years to come.

DOD has shown a lack of commitment to these programs, first by devolving these programs to the services 3 years ago and over the last 2 years not maintaining adequate funding. The reduction in funding will directly translate into fewer Americans having an opportunity to pursue advanced study in engineering, science, and mathematics, and therefore will reduce the pool of qualified workers with advanced technical skills for companies that design and manufacture defense systems.

While DOD has enormous current commitments, these pressing needs should not be allowed to squeeze out the small but very important investments required to create the next generation of highly skilled technical workers for the American defense industry. This would be shortsighted.

The task force recommends that the subcommittee support advanced technical education and provide \$325 million to the URI program for fiscal year 2006.

REDUCED S&T FUNDING IS A THREAT TO NATIONAL SECURITY

Since World War II the United States has led the world in science, innovation, and defense technology. This preeminent position in science, engineering and technology has made us an economic and military superpower, second to none. However, this lead is quickly eroding and within the next few years may be substantially reduced or may completely evaporate in some areas. Many European and Asian countries are educating far more engineers and scientists per capita and investing a greater portion of gross domestic product (GDP) in basic research and innovation than is the United States. If these trends continue, the United States, which relies heavily on advanced technology for military superiority, may find its dominant military position compromised. In the longer term the United States may become a second tier economic and military power.

A recent study performed by the Task Force on the Future of American Innovation, entitled "The Knowledge Economy: Is the United States Losing Its Competitive Edge" evaluated the position of the United States in several critical measures of technology, innovation, and scientific workforce development. While the report indi-

cated that the United States maintains a slight lead in research and discovery, there was concern expressed that, "Nations from Europe and Eastern Asia are on the fast track to pass the United States in scientific excellence and technological innovation".

The report compared the United States to other advanced, industrial countries in education, science and engineering workforce, scientific knowledge, innovation (as measured by the number of patent applications), investment in R&D, and trade balances in high technology goods and services.

Of all the measures considered the United States fared worst in the state of technical education. The United States already lags most advanced countries in several important measures of natural science and engineering education. These findings are supported by a 2002 Rand report titled, "Federal Investment in R&D", which noted that, "numerous competitor nations have made greater advances than the United States in terms of developing human resources for science and technology. Many countries in the European Union and Asia have exceeded U.S. degree production in the natural sciences and engineering. Europe overtook the United States in degree production in 1988 and has stayed ahead, and Asia pulled ahead in 1998. During this same period, U.S. degree attainment in these fields has declined." Currently 5.7 percent of U.S. bachelor degrees are in engineering or natural science. In European and developed or developing Asian countries this ranges from about 8 to 13 percent. For science and engineering doctoral degrees, which are becoming widely needed in industries that use advanced technology, the U.S. share of the worldwide total has been steadily decreasing. In 2000 only 22 percent of all doctoral degrees in engineering and natural science were awarded by American universities. This has fallen from more than 40 percent in the 1970's.

A useful measure of knowledge creation and the generation of new ideas is the number of technical papers published. The total number of U.S. publications has been nearly flat over the last 15 years. However, other countries have seen steady, and in some cases remarkable growth. Therefore, the U.S. share of worldwide technical papers published has fallen from 38 percent in 1988 to 31 percent in 2001. The EU countries when taken in total now lead in this area, accounting for 36 percent of world wide scientific publications. Asian countries, while still far behind at only 17 percent of the total, have experienced the most rapid growth in this category, more than doubling their output in the past 15 years. These countries will surpass the United States in about 6 years if current trends continue.

One area where the United States maintains a lead over developing Asian countries is in total R&D investment. Currently the United States invests over \$250 billion in combined private and public financed R&D compared with about \$100 billion for China, Singapore, South Korea, and Taiwan. However, even in this area the gap is rapidly closing. If current trends persist, the combined R&D expenditures of these countries will match the United States by about 2015. One of these reasons is the relatively slow growth in U.S. R&D funding. In 1970 about 0.1 percent of the GDP was invested in engineering and physical science research, mostly in the defense area. This proportion has steadily decreased and by 2000 less than half this much, or 0.05 percent of GDP, was allocated to research in these areas.

Finally the report compared U.S. balance of trade in advanced technology products, such aircraft, computers, communications equipment, pharmaceuticals, and precision and optical instruments. In 1990 the United States had a \$30 to \$40 billion trade surplus in these industries. This situation has steadily eroded to the point that in 2003 the United States ran a trade deficit in high technology products of nearly \$30 billion. One of the consequences of the growing economic power of China, which is increasing based on higher technology industries and an increasingly educated technical work force, is that China has surpassed the United States as the world's leading recipient of foreign direct investment (FDI).

There is a general belief among defense strategists that the United States must have the industrial base to develop and produce the military systems required for national defense.

Many members of Congress also hold this view. In order to have this capability, a native, skilled, scientific and engineering work force is required. There is a growing and alarming trend in many commercial industries to outsource engineering and other high-skilled service activities to foreign workers. In the past outsourcing was largely driven by cost considerations and was limited to low-cost, low-skilled workers. However, there is an emerging trend to outsource highly skilled engineering workforce products such as software and systems design and integration. A U.S.-based defense contractor cannot rely on engineers and scientists in other countries. Domestic content legislation for defense procurement makes little or no sense if the foremost scientists, engineers and manufacturers of sophisticated defense systems ultimately reside outside the United States. As the need for a more highly skilled

workforce, which includes a higher percentage of employees with Masters and Doctoral level technical educations, increases, and the available technical workforce decreases, corporations that must hire engineers who are U.S. Citizens with the appropriate security clearances, will be faced with serious shortages. A critical issue to be faced is: Will the United States, now dependent on foreign energy sources and finances to underwrite our deficits, now be dependent on foreign sources for scientific and engineering leadership?

We believe that protectionist measures will not be able to serve the long-term policy objective of having the capability to design, develop, and manufacture defense systems within the United States. In order to assure this capability, sufficient manpower, particularly those with the critical skills needed for creating advanced defense systems, needs to be available in sufficient numbers in the United States. Therefore, prudent investments in programs that create a robust, domestic supply of engineers and scientist with masters and doctoral level educations are in the national interest. Demographic data indicate that participation of U.S. students in science and engineering students will continue to decline. Retirements of scientists and engineers currently in the workforce will accelerate over the coming years. This will create a critical shortage of American citizens able to create the innovative, effective defense systems of the future.

As Congress considers the allocation of resources in the fiscal year 2006 defense appropriations, proper attention to the vital role that S&T plays in future innovations and defense workforce should be considered. There are critical shortages in the DOD S&T areas, particularly in those that support in basic research and technical education. These programs protect the stability of the Nation's defense base, will lead to technological superiority in future weapons systems, and educate new generations of scientists and engineers, who maintain our position as the world's technological leader.

Study after study has linked over 50 percent of our economic growth over the past 50 years to technological innovation. U.S. leadership in technological innovation is being seriously threatened by the accelerating pace of investments by other nations in R&D, their innovative capacity and their efforts in technical workforce development. All of these trends are occurring within the framework of an increasingly competitive global economy.

CONCLUSION

Leadership in engineering research, education and practice is a prerequisite to global leadership in technology innovation. A soon-to-be released National Academy of Engineering report entitled "Assessing the Capacity of the U.S. Engineering Research Enterprise" provides a roadmap for balancing the Federal R&D portfolio and re-establishing basic engineering research as a priority for this Nation. We strongly urge this committee to review the recommendations outlined in this report, particularly those pertaining to discovery-innovation institutes, strengthening linkages between industry and research universities, and human capital. The report is available at [http://www.nae.edu/NAE/engecocom.nsf/weblinks/MKEZ-68JK55/\\$File/Engineering%20Research.pdf](http://www.nae.edu/NAE/engecocom.nsf/weblinks/MKEZ-68JK55/$File/Engineering%20Research.pdf).

In conclusion, we thank the subcommittee for its ongoing strong support of Defense S&T. The Task Force believes that proposed funding levels are inadequate and the increased investments that are outlined are necessary and will make a vital contribution to our national security and to a stronger, more vibrant economy.

ASME International is a non-profit technical and educational organization with 125,000 members worldwide. The Society's members work in all sectors of the economy, including industry, academic, and government. This statement represents the views of the ASME Department of Defense Task Force of the Committee on Federal R&D of the Council on Engineering and is not necessarily a position of ASME as a whole.

Senator STEVENS. Our next witness is William Destler of the University of Maryland, is that correct? Is it "Doctor Destler?"

STATEMENT OF WILLIAM W. DESTLER, Ph.D., PROVOST, UNIVERSITY OF MARYLAND, COLLEGE PARK, ON BEHALF OF THE ASSOCIATION OF AMERICAN UNIVERSITIES

Dr. DESTLER. It is.

Senator STEVENS. Thank you, sir.

Dr. DESTLER. Mr. Chairman, Senator Inouye: I am here to represent the American Association of Universities (AAU), which con-

sists of 60 prominent public and private universities that together conduct about 60 percent of all federally sponsored research and produce about half of the Nation's Ph.D.'s each year.

I want to thank the two of you and the rest of the subcommittee for your past strong support of defense science and technology research efforts. I think it is no surprise to any of us that in the United States the combined research capabilities of our Federal laboratories, including our DOD labs, together with our corporate research assets, which are frankly in decline, and those in our research universities, represent one of our last unfair advantages over potential adversaries abroad. Spinoffs from defense science and technology, moreover, have resulted in the introduction of many new products and services in the private sector and are a key element in the maintenance of our national standard of living.

So as the subcommittee begins its work on the fiscal year 2006 defense appropriations bill, the AAU offers two major recommendations. One, strengthen support for basic research in defense science and technology. Funding for 6.1 research has steadily declined over the last decade, despite the fact that basic research is the seed corn that leads to technological superiority in defense systems. It is this technological superiority that has materially shortened military conflicts in which the United States has engaged in recent years and saved the lives of countless U.S. citizens.

Funding for 6.1 basic research, moreover, is a two-fer. It not only engages our top scientists and engineers nationwide in support of national defense interests, but it also supports the training of tomorrow's experts in these critical disciplines.

Second, the AAU supports the full funding of DOD's new National Defense Education Act phase I initiative, a program that many years ago benefited our previous speaker. In recent years the United States has failed to attract enough of its own best students to study in areas of critical importance to our national security. The new National Defense Education Act is intended to provide scholarships and fellowships to undergraduates and graduate students entering critical fields such as science, mathematics, engineering and foreign languages in return for a commitment of national service after completion of their studies—a perfect match in my opinion.

The AAU therefore fully supports the funding of the \$10.3 million requested for this program in fiscal year 2006 and recommends a greatly expanded program in fiscal year 2007 if funding will permit.

I am very grateful for the chance to speak to you today and, as you know, I am a very efficient speaker and I will give you a little bit of time back.

[The statement follows:]

PREPARED STATEMENT OF WILLIAM W. DESTLER

Mr. Chairman and members of the subcommittee, I am William W. Destler, Senior Vice President for Academic Affairs and Provost, University of Maryland, College Park. I appear before you today on behalf of the Association of American Universities, which represents 60 of America's most prominent public and private research universities. AAU's member universities perform 60 percent of federally funded university-based research and award approximately half of all Ph.D. degrees granted annually.

I greatly appreciate this opportunity to testify on behalf of AAU on the important role the Department of Defense (DOD) plays in supporting both research and education in fields critical to our national defense. Before going further, I would like to thank Chairman Stevens, Ranking Member Inouye, and the members of the subcommittee for your strong support for Defense Science and Technology (S&T) programs in the past. For each of the past 4 years the final funding levels for Defense S&T have met or exceeded 3 percent of the total defense budget—a target originally established in 1989 by the Defense Science Board and then included in the Quadrennial Defense Review in 2001. This strong support for Defense S&T has been due in large part to your efforts. Your support of Defense S&T is even more significant given that in each of these years, the budget proposed by the Pentagon for S&T programs fell short of the 3 percent target.

As the subcommittee begins its work on the fiscal year 2006 defense appropriations bill, AAU offers the subcommittee two major recommendations.

Within funds provided for Defense S&T, strengthen support for basic research.—While significantly more resources have been allocated to Research, Development, Testing and Evaluation (RDT&E) in recent years and as referenced above, the 3 percent target for Defense S&T has been met, the percentage of this funding devoted to basic 6.1 research has declined. In fact, over the last 20 years, basic 6.1 research funding has declined in inflation-adjusted dollars, despite the demonstrated benefit of such funding.

In December 2004, the Council on Competitiveness—a national consortium of industrial, university and labor leaders—released a report entitled *Innovate America*, which identified innovation as “the single most important factor in determining America’s success in the 21st century.” Among its recommendations, the report urged that DOD restore its historic commitment to pioneering discoveries by devoting not less than one-fifth of the Defense S&T budget to basic research. To achieve that goal, AAU recommends increasing funding for defense basic research (budget category 6.1) programs by \$200 million in fiscal year 2006 to \$1.7 billion.

Fully fund DOD’s New National Defense Education Act (NDEA)—Phase I Initiative.—This year, in addition to the existing University Research Initiative, the National Defense Science and Engineering Graduate Fellowship Program, and the National Security Education Program (NSEP)—all programs for which AAU urges your continued support—the Pentagon has proposed \$10.3 million for a new National Defense Education Act—Phase I program. The NDEA initiative would provide scholarships and fellowships to undergraduate and graduate students entering critical fields of science, mathematics, engineering and foreign languages in return for a commitment of national service after completion of their studies.

AAU applauds this new initiative and believes it is a positive step toward addressing U.S. science and engineering (S&E) workforce needs. AAU encourages you to provide the \$10.3 million requested for this program in fiscal year 2006 and recommends greatly expanding this exciting new initiative in fiscal year 2007. AAU has called for an even more comprehensive, multi-agency national defense education initiative to be developed aimed at stemming national educational deficiencies and encouraging more U.S. students to study in critical fields of knowledge.

In the time I have remaining, let me briefly outline some key reasons why your support for basic defense research is critical. Then I will conclude with some final remarks about why AAU supports DOD’s National Defense Education Act proposal.

WHY INVESTING IN DOD RESEARCH IS CRITICAL FOR NATIONAL DEFENSE

DOD basic (6.1) research is the foundation for the scientific and technological breakthroughs required to meet future military needs.—During the Cold War, DOD provided robust support for breakthrough basic research performed at the Nation’s universities and national laboratories. This support resulted in many of the highly-effective technologies currently fielded in the war on terrorism today, such as global navigation, radar, laser targeting systems and “smart” bombs; lightweight body armor; the Internet; night vision and thermal imaging; unmanned aerial vehicles; and biological and chemical sensors. This funding was also critical to supporting some of the Nation’s top scientific talent.

Since the end of the Cold War, DOD’s focus on basic research has declined significantly, dropping from 20 percent of total defense S&T funds in 1980 to less than 12 percent in fiscal year 2005. According to an assessment of DOD basic research released earlier this year, the decline in funding for 6.1 basic research in real terms from 1993 to 2004 was 10 percent according to the inflation indexes used by the DOD and 18 percent using the Consumer Price Index (CPI). Growing concerns about declining investments in fundamental research have been highlighted in a number

of recent news articles which have brought attention to DARPA's move away from support of high risk, high payoff basic research.

As the threats we face have grown more complex, the need for new knowledge is greater now than ever before.—New dangers facing the military, such as high technology terrorism, information warfare, and the proliferation of weapons of mass destruction, require new and more sophisticated technologies. To meet these threats, DOD must strengthen its front-end commitment to basic research in areas such as: nanotechnology; high-speed microchips; computing and microchip capacity; composites research and stealth technology; explosive detection devices; self-healing wound technology; cybersecurity and encryption; and biological and chemical defense. The knowledge required to generate cutting edge technologies in these areas is critically dependent upon DOD's sustained investments in long-term, high risk, defense-oriented research performed at U.S. universities.

At the University of Maryland, for example, DOD support has enabled the University to bring together researchers from academia, industry, and DOD laboratories to work together on problems ranging from energetic materials to advanced electronic devices. This year, for example, we are partnering with DOD to establish a new Joint Institute for Knowledge Discovery which will assist the agency with the extraordinary problem of sifting important information from the huge quantities of information collected daily by our intelligence services, including NSA. This effort will involve researchers from several universities, the private sector, and DOD.

Defense support for research enlists today's top scientists in support of national defense while training tomorrow's experts in critical disciplines.—DOD's basic research investment produces not only military technology but also the people without whom technology would never see the light of day. DOD support to universities and DOD laboratories keeps top scientists and engineers involved in the academic disciplines that underpin national defense. It also plays a vital role in training the next generation of scientists and engineers who will become the future defense workforce and implement new defense innovations well into the 21st century.

DOD is the third-largest Federal sponsor of university-based research. More than 300 universities and colleges conduct DOD-funded research. This research is concentrated in fields where advances are most likely to contribute to national defense: DOD provides 71 percent of Federal funding for electrical engineering, 46 percent for materials engineering, 38 percent for computer sciences, and 30 percent for ocean sciences. DOD also sponsors fellowships and provides significant support for graduate students in critical defense fields such as computer science and aerospace and electrical engineering.

But there are still too few U.S. students studying these critical fields. The need to attract and retain them is the reason that AAU has endorsed DOD's proposal for the new National Defense Education Act and has called for an even greater multi-agency initiative in future years.

WHY AAU SUPPORTS A NEW NATIONAL DEFENSE EDUCATION ACT

As you know, a concerted effort to increase government investment in security-related research, education, and training is not novel. In response to the launch of Sputnik and the emerging threat posed by the Soviet Union, Congress in 1958 created NASA and adopted the National Defense Education Act (NDEA). The NDEA inspired generations of U.S. students to pursue fields critical to our national security, and enabled the United States to establish dominance in science and technology for military and civilian purposes.

Our future military challenges simply cannot be met without an appropriately educated and trained U.S. defense workforce. These needs have been highlighted by several sources, including the Hart/Rudman Commission on National Security, the National Science Board, and most recently, the defense industry and the Pentagon itself.

The sad truth is that in recent years, our country has failed to attract enough of our own best students to areas of critical importance to our security. This has left us critically dependent upon foreign talent to fulfill our workforce needs.

Since 9/11, however, there has been a drop in the number of foreign students coming to the United States to study. Moreover, most of these foreign students cannot obtain security clearances and cannot be employed in DOD laboratories or by the defense industry. Based on numerous benchmarks contained in a recent report by the Task Force on the Future of American Innovation, the scientific and technological advantage that the United States has held over other nations is eroding.

Rapidly developing economies, particularly those in Asia, are vigorously investing in their own research and higher education infrastructures, which is thus increasing

their ability to both educate their people at home and to perform cutting-edge research.

SUMMARY

For reasons of national, homeland, and economic security, the United States must produce more graduates in critical fields. Not only are DOD and the defense and aerospace industries experiencing significant difficulty in attracting and retaining the science and engineering talent they require, but as many as 13,000 DOD laboratory scientists will be eligible to retire in the next decade. There may not be sufficient numbers of graduating, security-clearable U.S. students to replace them. In addition, thousands more scientists and engineers will be needed in other governmental agencies such as NASA and the Department of Energy, and in energy-related industries. And the military and intelligence communities face an acute shortage of linguists and area specialists in key parts of the world. We must act now to fill the pipeline of U.S. students trained in fields vital to our national and economic security.

The Nation should not wait until we face a national security workforce crisis. It should act now. With your help, AAU believes that the DOD should and will play a leadership role in this effort.

We urge your support for the \$10.3 million requested for the NDEA-Phase I proposal and encourage you to recognize the need for additional resources for defense basic research. This is a small, but vital, investment in addressing the monumental national defense challenges we now face.

Again, I would like to thank the subcommittee for its continued support of Department of Defense research and look to your continued leadership in this area.

Senator STEVENS. Well, doctor, tell me. Does this money really flow into the students or just into the university and the fixed staff?

Dr. DESTLER. It goes entirely to the students. It provides scholarships and fellowships for the students to encourage them to study.

Senator STEVENS. This amount goes beyond the grants for research. It really reaches out to the students?

Dr. DESTLER. That is exactly correct.

Senator STEVENS. Well, you will have our support on that. I just finished a meeting with some of the people that loan money to students and they tell me there is not enough incentive for the science and engineering students. So we want to try to help you on that.

Dr. DESTLER. Exactly. Thank you very much for your support.

Senator STEVENS. Thank you very much.

Sydney Hickey of the National Military Family Association.

STATEMENT OF SYDNEY HICKEY, ON BEHALF OF THE NATIONAL MILITARY FAMILY ASSOCIATION

Ms. HICKEY. Yes, sir.

Mr. Chairman, Senator Inouye: the National Military Family Association (NMFA) appreciates this opportunity to express its views and the views of the families that we represent. We continue to be very grateful to you for your strong support of military family issues. Tremendous strides have been made in predeployment, deployment, and return and reunion support for families. Our families are concerned, however, about the long-term effects of frequent deployments, both on their service member and on their own family's integrity. Return and reunion programs must be long-term and include the families even when the service member is no longer on Active duty.

Families are also concerned about the availability of quality child care. NMFA believes the situation will only worsen as rebasing, transformation, and BRAC cause significant shifts in population. Alternatives are being developed by the Department of Defense and

we support these initiatives and urge funding for their rapid expansion.

Transformation, overseas rebasing, and BRAC will require significantly more resources than are currently available to ensure that quality of life programs remain in effect at losing installations until the last family has left and are in place at gaining installations before the first families arrive. NMFA is therefore very concerned about recent reports that basic family support is short of funding.

NMFA appreciates the many schools that have stepped up to the plate to provide needed counseling and other services to the children of deployed military parents. We believe that the extraordinary workload currently being placed on school systems necessitates an increase in the DOD impact aid supplement to \$50 million and continued congressional oversight of the resources requested by DOD for their own schools.

We also believe additional funds will be required in the out-years to assist those school districts that will receive many thousands of new military children from overseas areas and because of BRAC. NMFA believes robust funding of family support programs, including the education of children, is imperative for readiness.

Significant beneficiary turmoil occurred during the changeover to the new TRICARE contracts. While progress has been made, difficulties remain. Access standards for Prime enrollees, particularly those enrolled in military treatment facilities, are not being met in many cases. Families returning stateside due to overseas rebasing will not be able to be accommodated in many instances in military treatment facilities (MTFs). If the BRAC proposals for MTFs are implemented, significant inpatient workload will also shift out of the MTFs. NMFA believes the military health care system should be realistically and fully funded to provide quality and promised care to all beneficiaries wherever they receive that care.

NMFA is very grateful for the significant increase in the death gratuity and the servicemen's group life insurance (SGLI), but strongly believes that all in line of duty deaths must be treated the same; and we continue to believe that removing the dependency indemnity compensation offset to the survivor benefit plan is the best way to establish the long-term financial stability of the surviving family.

NMFA thanks you, Mr. Chairman and Senator Inouye, and your fellow members of this subcommittee for your support of military families and respectfully requests that it continue.

Senator STEVENS. Thank you very much.

Senator Inouye.

Senator INOUE. If I did not do that my wife would not let me home. If I did not support you my wife would throw me out.

Ms. HICKEY. More power to her.

Thank you.

Senator STEVENS. Thank you very much.

[The statement follows:]

PREPARED STATEMENT OF KATHLEEN B. MOAKLER, DEPUTY DIRECTOR, GOVERNMENT RELATIONS, THE NATIONAL MILITARY FAMILY ASSOCIATION

The National Military Family Association (NMFA) is the only national organization whose sole focus is the military family and whose goal is to influence the devel-

opment and implementation of policies which will improve the lives of those family members. Its mission is to serve the families of the seven uniformed services through education, information and advocacy.

Founded in 1969 as the Military Wives Association, NMFA is a non-profit 501(c)(3) primarily volunteer organization. NMFA today represents the interests of family members and the active duty, reserve components and retired personnel of the seven uniformed services: Army, Navy, Air Force, Marine Corps, Coast Guard, Public Health Service and the National Oceanic and Atmospheric Administration.

NMFA Representatives in military communities worldwide provide a direct link between military families and NMFA staff in the Nation's capital. Representatives are the "eyes and ears" of NMFA, bringing shared local concerns to national attention.

NMFA receives no Federal grants and has no Federal contracts.

NMFA's web site is located at <http://www.nmfa.org>.

Mr. Chairman and distinguished members of this subcommittee, the National Military Family Association (NMFA) would like to thank you for the opportunity to present testimony on quality of life issues affecting servicemembers and their families. NMFA is also grateful for your leadership in the 108th Congress in securing funds to:

- Make increases in the Family Separation Allowance and Imminent Danger Pay permanent.
- End the age-62 Survivor Benefit Plan offset.
- Help DOD support the education of military children.
- Support family readiness programs and military health care.

As a founding member of The Military Coalition, NMFA subscribes to the recommendations contained in the Coalition's testimony presented for this hearing. We especially endorse the Coalition's request that this subcommittee work to protect the benefits depended upon by members of the all-volunteer force, retirees, their families, and survivors. According to DOD statistics, approximately one-fourth of today's servicemembers came from military families. Ensuring a robust support network for today's military families and fulfilling promises made to military retirees will enhance the capabilities of tomorrow's force.

NMFA also endorses The Military Coalition's recommendations to:

- Enhance education and outreach to improve military family readiness and support families of deployed active duty, National Guard, and Reserve servicemembers.
- Fully-fund the commissary benefit and scrutinize proposals to close commissaries or combine exchange services.
- Ease the transition of Guard and Reserve families to TRICARE when the servicemember is mobilized by providing a choice of purchasing TRICARE coverage when in drill status or receiving Federal payment of civilian health care premiums when the servicemember is mobilized.
- Fully-fund the Defense Health Program budget to provide access to quality care for all beneficiaries.
- Authorize full Basic Allowance for Housing (BAH) for Guard and Reserve members mobilized for more than 30 days.

In this statement, NMFA will address issues related to military families.

FAMILY READINESS THROUGHOUT THE DEPLOYMENT CYCLE

The Services continue to refine the programs and initiatives to provide support for military families in the period leading up to deployments, during deployment, and the return and reunion period. Our message to you today is simple: increased funding to support family readiness is paying off! Family readiness over the long term requires that resources must be directed not just at deployment-related support programs, but also to sustain the full array of baseline installation quality of life programs. As referenced in NMFA's 2004 analysis report, "Serving the Home Front: An Analysis of Military Family Support from September 11, 2001 through March 31, 2004," consistent levels of targeted family readiness funding are needed, along with consistent levels of command focus on the importance of family support programs.

NMFA is very concerned about recent reports from Service leadership and from individual installations about potential shortfalls in base operations funding and appropriated fund support for Morale, Welfare and Recreation (MWR) and other quality of life programs. While some of these cuts may be temporary, in programs and facilities seeing declines in patronage due to the deployment of units from the installations, others are in services that support families, such as spouse employment support, volunteer support, child development center hours, or family member ori-

entation programs. These core quality of life programs make the transition to military life for new military members easier and lessen the strain of deployment for all families. NMFA does not have the expertise to ferret out exact MWR funding levels from Service Operations and Maintenance budgets. We are concerned about the state of this funding—both appropriated and non-appropriated fund support—because of what we hear from servicemembers and families, what we read in installation papers chronicling cutbacks, and from Service leaders who have identified shortfalls in base operations funding in the administration's fiscal year 2006 budget request. Resources must be available for commanders and others charged with ensuring family readiness to help alleviate the strains on families facing more frequent and longer deployments.

NMFA is particularly troubled by what we see as mixed signals regarding DOD's long-term commitment to quality of life services and programs. In recent testimony, several DOD and Service leaders have focused on the costs of many benefit programs and emphasized plans to increase bonuses, as opposed to other types of benefits or compensation. NMFA regards this narrow focus on bonuses as an inadequate quick fix to recruiting and retention woes. We agree with the Senior Enlisted Advisors who, in recent testimony, emphasized the importance of addressing quality of life issues for active, National Guard and Reserve servicemembers and their families. They listed child care and housing as top priorities, in addition to pay, health care, and educational opportunities for servicemembers and their families. NMFA believes military leaders must recognize that the robust military benefit package needed to recruit and retain a quality force demands attention to both pay and non-pay elements of that package.

WHAT'S NEEDED FOR FAMILY SUPPORT?

Family readiness volunteers and installation family support personnel in both active duty and reserve component communities have been stretched thin over the past 3½ years as they have had to juggle pre-deployment, ongoing deployment, and return and reunion support, often simultaneously. Unfortunately, this juggling act will likely continue for some time. Family member volunteers support the servicemembers' choice to serve; however, they are frustrated with being called on too often during longer than anticipated and repeated deployments. Military community volunteers are the front line troops in the mission to ensure family readiness. They deserve training, information, and assistance from their commands, supportive unit rear detachment personnel, professional backup to deal with family issues beyond their expertise and comfort level, and opportunities for respite before becoming overwhelmed. NMFA is pleased to note that the Army's paid Family Readiness Support Assistants are getting rave reviews from commanders and family readiness volunteers—funding is needed so that more of these positions can be created.

NMFA knows that complicated military operations can result in deployments of unexpected lengths and more frequent deployments. But we also understand the frustrations of family members who eagerly anticipated the return of their servicemembers on a certain date only to be informed at the last minute that the deployment will be extended or that the unit will be deployed again within a year or less of its return. Other than the danger inherent in combat situations, the unpredictability of the length and frequency of deployments is perhaps the single most important factor frustrating families today. Because of this unpredictability, family members need more help in acquiring the tools to cope. They also need consistent levels of support throughout the entire cycle of deployment, which includes the time when servicemembers are at the home installation and working long hours to support other units who are deployed or gearing up their training in preparation for another deployment. As one spouse wrote to NMFA:

"This is really starting to take a toll on families out here since some families are now on the verge of their third deployment of the servicemember to Iraq. Families are not so much disgruntled by the tempo of operations as they are at a loss for resources to deal with what I've started calling the 'pivotal period.' This is the point where the honeymoon from the last deployment is over, the servicemember is starting to train again for the next deployment in a few months and is gone on a regular basis, the family is balancing things with the servicemember coming and going and also realizing the servicemember is going to go away again and be in harm's way. We have deployment briefs that set the tone and provide expectations for when the servicemember leaves. We have return and reunion briefs that prepare families and provide expectations for when the servicemember returns. These two events help families know what is normal and what resources are available but there is an enormous hole for that 'pivotal period.' No one is getting families together to let them

know their thoughts, experiences and expectations are (or aren't) normal in those in between months. Deployed spouses have events, programs, and free child care available to them as they should—but what about these things for the in-betweeners who are experiencing common thoughts and challenges?"

Efforts to improve the return and reunion process must evolve as everyone learns more about the effects of multiple deployments on both servicemembers and families, as well as the time it may take for some of these effects to become apparent. Information gathered in the now-mandatory post-deployment health assessments may also help identify servicemembers who may need more specialized assistance in making the transition home over the long term. NMFA applauds the announcement made in January by the Assistant Secretary of Defense for Health Affairs that DOD would mandate a second assessment at the 4- to 6-month mark following the servicemember's return. We urge Congress to ensure the military Service medical commands have the personnel resources needed to conduct these assessments.

NMFA is concerned that much of the research on mental health issues and readjustment has focused on the servicemember. More needs to be done to study the effects of deployment and the servicemembers' post-deployment readjustment on family members. Return and reunion issues are long-term issues. More also needs to be done to ensure proper tracking of the adjustment of returning servicemembers. Post-deployment assessments and support services must also be available to the families of returning Guard and Reserve members and servicemembers who leave the military following the end of their enlistment. Although they may be eligible for transitional health care benefits and the servicemember may seek care through the Veterans' Administration, what happens when the military health benefits run out and deployment-related stresses still affect the family?

NMFA is pleased that DOD has intensified its marketing efforts for Military OneSource as one resource in the support for families throughout the entire deployment cycle. Military OneSource provides 24/7 access, toll-free or online, to community and family support resources, allowing families to access information and services when and where they need them. DOD, through OneSource, has committed to helping returning servicemembers and families of all Services access local community resources and receive up to six free face-to-face mental health visits with a professional outside the chain of command. NMFA is concerned that some of the recent cuts in family program staff at installations suffering a shortfall in base operations funding may have been made under the assumption that necessary support could be provided remotely through OneSource. The OneSource information and referral service must be properly coordinated with other support services, to enable family support professionals to manage the many tasks that come from high optempo.

Geographically-isolated Guard and Reserve families must depend on a growing but still patchy military support network. Countless local and State initiatives by government organizations and community groups have sprung up to make dealing with deployment easier for Guard and Reserve family members. One new initiative that has the potential to network these local efforts is the National Demonstration Program for Citizen-Soldier Support. This community-based program is designed to strengthen support for National Guard and Reserve families by building and reinforcing the capacity of civilian agencies, systems, and resources to better serve them. Initiated by the University of North Carolina at Chapel Hill, with \$1.8 million in seed money provided in the fiscal year 2005 Defense Appropriations Act, the Citizen-Soldier Support Program will be coordinated closely with existing military programs and officials in order to avoid duplication of effort and to leverage and optimize success. Leveraging community programs with Federal funding and programs can be a win-win situation. NMFA recommends continued funding of this program to allow it time to develop a model that can be replicated in other locations and to set up training to achieve this replication.

HEALTH CARE

This year, NMFA is monitoring the after-effects of the transition to the new round of TRICARE contracts and the continued transition of mobilized Guard and Reserve members and their families in and out of TRICARE. We are concerned that the Defense Health Program may not have all the resources it needs to meet both military medical readiness mission and provide access to health care for all beneficiaries. The Defense Health Program must be funded sufficiently so that the direct care system of military treatment facilities and the purchased care segment of civilian providers can work in tandem to meet the responsibilities given under the new contracts, meet readiness needs, and ensure access for all TRICARE beneficiaries. Families of Guard and Reserve members should have flexible options for their health care coverage that address both access to care and continuity of care

NMFA believes that “rosy” predictions when significant contract changes are being made are a disservice to both beneficiaries and the system. NMFA is appreciative of the intense effort being made to improve the referral and authorization process, but is concerned about the cost of the work-around and the prospect of a new round of disruptions when DOD’s electronic referral and authorization system is implemented. It is imperative that whatever changes are made, the promised Prime access standards must be met.

NMFA again notes that more must be done to educate Standard beneficiaries about their benefit and any changes that might occur to that benefit. To end the TRICARE Standard access problem that is a constant complaint of beneficiaries, DOD must work harder to attract providers and understand the reasons why providers do not accept TRICARE Standard.

We are closely watching the impending implementation of the TRICARE Reserve Select health care benefit for the reserve component. We have several concerns about the implementation of this program, especially regarding beneficiary education. Both the servicemember and the family need to understand the coverage provided under Reserve Select, the costs, and, most importantly, how Reserve Select differs from the TRICARE Prime or Prime Remote benefit the family used while the servicemember was on active duty. Emphasis must continue on promoting continuity of care for families of Guard and Reserve servicemembers. NMFA’s recommendation to enhance continuity of care for this population is to allow members of the Selected Reserve to choose between buying into TRICARE when not on active duty or receive a DOD subsidy allowing their families to remain with their employer-sponsored care when mobilized. NMFA also recommends that the rules governing health care coverage under TAMP be updated to allow the servicemember and family to remain eligible for TRICARE Prime Remote.

ALARMING DISCOVERY

Over the years, NMFA has received anecdotal information from family members that providers are not accepting them as TRICARE patients because the TRICARE reimbursement level was below that provided by Medicaid. Needless to say, family members have been outraged! However, since TRICARE reimbursement is tied by law to Medicare reimbursement, NMFA has believed the problem to be far larger than the military health care system. Alarm bells sounded, however, when NMFA was recently informed of the situation in several locations where differences between Medicaid and TRICARE rates for obstetrical care or pediatric procedures have added to the reasons providers give for not accepting TRICARE patients. NMFA does not know how prevalent this problem may be across the country and urgently requests that Congress require DOD to compare the reimbursement rates of Medicaid with those of TRICARE. We are particularly concerned with the rates for pediatric and obstetrical/gynecological care where Medicare has little experience in rate setting.

SURVIVORS

NMFA believes that the government’s obligation as articulated by President Lincoln, “to care for him who shall have borne the battle and for his widow and his orphan,” is as valid today as it was at the end of the Civil War. We know that there is no way to compensate those who have lost their servicemember, but we do owe it to these families to help ensure a secure future. NMFA strongly believes that all servicemembers’ deaths should be treated equally. Servicemembers are on duty 24 hours a day, 7 days a week, 365 days a year. Through their oath, each servicemember’s commitment is the same. The survivor benefit package should not create inequities by awarding different benefits to families who lose a servicemember in a hostile zone versus those who lose their loved one in a training mission preparing for service in a hostile zone. To the family, the loss is the same. NMFA was pleased that both the House and Senate included increased survivor benefits in their versions of the fiscal year 2005 Emergency Supplemental Appropriations Act. We urge this subcommittee to ensure that these increased benefits will be funded for fiscal year 2006.

NMFA recommends the following changes to support surviving family members of active duty deaths:

- Treat all active duty deaths equally. The military Services have procedures in place to make “line of death” determinations. Do not impose another layer of deliberation on that process.
- Eliminate the DIC offset to SBP. Doing so would recognize the length of commitment and service of the career servicemember and spouse. Eliminating the offset would also restore to those widows/widowers of those retirees who died

- of a service-connected disability the SBP benefit that the servicemember paid for.
- Improve the quality and consistency of training for Casualty Assistance Officers and family support providers so they can better support families in their greatest time of need.
- In cases where the family has employer sponsored dental insurance, treat them as if they had been enrolled in the TRICARE Dental Program at the time of the servicemember's death, thus making them eligible for the 3-year survivor benefit.
- Update the TRICARE benefit provided in 3-year period following the servicemember's death in which the surviving spouse and children are treated as their active duty family members and allow them to enroll in TRICARE Prime Remote.
- Allow surviving families to remain in government or privatized family housing longer than the current 6-month period if necessary for children to complete the school year, with the family paying rent for the period after 6 months.
- Expand access to grief counseling for spouses, children, parents, and siblings through Vet Centers, OneSource, and other community-based services.
- To provide for the long-term support of surviving families, establish a Survivor Office in the Department of Veterans' Affairs.

WOUNDED SERVICEMEMBERS HAVE WOUNDED FAMILIES

Post-deployment transitions could be especially problematic for servicemembers who have been injured and their families. NMFA asserts that behind every wounded servicemember is a wounded family. Wounded and injured servicemembers and their families deserve no less support than survivors. Spouses, children, and parents of servicemembers injured defending our country experience many uncertainties, including the injured servicemember's return and reunion with their family, financial stresses, and navigating the transition process to the Department of Veterans Affairs (VA).

Support, assistance, and above all, counseling programs, which are staffed by real people who provide face to face contact, are needed for the families of wounded/injured servicemembers. Whenever feasible, Military OneSource should be used as a resource multiplier. Mental health services and trained counselors need to be available and easily accessible for all servicemembers and their families who may suffer "invisible" injuries like combat stress and PTSD. Distance from MTFs or VA Centers should not preclude servicemembers and their families from seeking and receiving care. Respite care options should be provided and accessible for family members who care for the seriously wounded.

NMFA recommends the following changes to support wounded and injured servicemembers and their families:

- Direct the military Services, OSD, and the VA to improve their coordination in support of the wounded servicemember and family.
- Consider initiatives to enhance the short term financial stability of the wounded servicemember's family, such as: continuing combat pays and tax exclusion, creating a disability gratuity, or implementing a group disability insurance program.
- Extend the 3-year survivor health care benefit to servicemembers who are medically retired and their families.
- Enhance servicemember and spouse education benefits and employment support.
- Establish a Family Assistance Center at every Military Treatment Facility (MTF) caring for wounded servicemembers.

EDUCATION FOR MILITARY CHILDREN

A significant element of family readiness is an educational system that provides a quality education to military children, recognizing the needs of these ever-moving students and responding to situations where the military parent is deployed and/or in an armed conflict. Addressing the needs of these children, their classmates, and their parents is imperative to lowering the overall family stress level and to achieving an appropriate level of family readiness. But it does not come without cost to the local school system. Schools serving military children, whether DOD or civilian schools, need the resources available to meet military parents' expectation that their children receive the highest quality education possible.

NMFA is appreciative of the support shown by Congress for the schools educating military children. You have consistently supported the needs of the schools operated by the DOD Education Activity (DODEA), both in terms of basic funding and mili-

tary construction. The commitment to the education of military children in DOD schools between Congress, DOD, military commanders, DODEA leadership and staff, and especially military parents has resulted in high test scores, nationally-recognized minority student achievement, parent involvement programs and partnership activities with the military community. This partnership has been especially important as the overseas communities supported by DODDS and many of the installations with DDESS schools have experienced high deployment rates. DOD schools have responded to the operations tempo with increased support for families and children in their communities. NMFA is concerned that 3 years of a weak dollar has forced the DODDS schools, especially in Europe, to divert funds from maintenance and other accounts to pay necessary increases in employee allowances. Given the high level of deployment from European communities, we ask that Congress work with DOD to ensure DOD schools have the resources they need to handle their additional tasks.

NMFA is also appreciative of the approximately \$30 million Congress adds in most years to the Defense budget to supplement Impact Aid for school districts whose enrollments are more than 20 percent military children and for the additional funding to support civilian school districts who are charged with educating severely disabled military children. NMFA does not believe, however, that this amount is sufficient to help school districts meet the current demands placed on them. Additional counseling and improvements to security are just two needs faced by many of these school districts. NMFA asks this subcommittee to increase the DOD supplement to Impact Aid to \$50 million so that the recipient school districts have more resources at their disposal to educate the children of those who serve.

SPOUSE EMPLOYMENT

Sixty-nine percent of all military spouses and 86 percent of junior enlisted spouses are in the labor force. For many families this second income is a critical factor in their financial well being. Concerned that spouses desiring better careers will encourage servicemembers to leave the military, DOD has instituted several programs to support military spouses in their career goals. With 700,000 active duty spouses, however, the task of enhancing military spouse employment is too big for DOD to handle alone. Improvements in employment for military spouses and assistance in supporting their career progression will require increased partnerships and initiatives by a variety of government agencies and private employers.

Despite greater awareness of the importance of supporting military spouse career aspirations, some roadblocks remain. State laws governing unemployment compensation vary greatly and very few states generally grant unemployment compensation eligibility to military spouses who have moved because of a servicemember's government ordered move. NMFA has been pleased to note that some States are examining their in-state tuition rules and licensing requirements. These changes ease spouses' ability to obtain an education or to transfer their occupation as they move. NMFA is appreciative of the efforts by DOD to work with States to promote the award of unemployment compensation to military spouses, eligibility for in-state tuition, and reciprocity for professional licenses. Its website, usa4militaryfamilies.org, provides details on these State initiatives.

CHILD CARE

On a recent visit to Europe, President and Mrs. Bush stopped at Ramstein Air Base, Germany, to thank the troops for their service and dedication to our Nation. While visiting with families there, Mrs. Bush was made aware of the lack of child care providers in the community. This information is not new to NMFA. We have been hearing from our field Representatives that this is an on-going problem, especially OCONUS where child care options are limited. As one of our members in Germany stated: "Drawing from the pool of military spouses is no longer working over here. Big shortages. They are asking too much of the spouses as it is." Families in Europe state that funding targeted to pay raises for child care providers and increased subsidies for in-home providers could help the Services recruit more child care workers.

A recent online survey conducted by NMFA further outlines the need for more child care. Of special interest in the survey results was the frustration from dual military parents. Dealing with deployments, drill weekends and lack of child care facilities were of great concern. Families also cited concerns about finding child care after relocating to a new area. Because the servicemember is often quickly deployed after relocation, the spouse must deal with the added stress as he/she looks for employment and childcare in the new location. At a recent hearing, three of the four Service Senior Enlisted Advisors cited child care as their number one concern for

their servicemembers and families. The advisors spoke of lost duty time by servicemembers unable to find child care. DOD officials estimate that the Department needs at least 38,000 more slots. According to the Enlisted Advisors, the need may be greater. All spoke of waiting lists stretching into the thousands.

DOD is expanding partnerships to meet the demand described by the NMFA survey respondents and the Senior Enlisted Advisors. The National Association of Child Care Resource and Referral Agencies (NACCRRA) initiated a program entitled Operation Child Care to provide donated short term respite and reunion child care for members of the National Guard and Reserve returning from Operation Enduring Freedom/Operation Iraqi Freedom for the 2-week Rest and Recreation leave period. Another initiative through Military OneSource offers 10 hours of free childcare to each service member returning on R&R leave. NACCRA is also partnering with DOD on "Operation Military Child Care," which will help provide much needed government-subsidized, high quality child care for mobilized and deployed military parents who cannot access a military child development center. More funding dedicated to support families' access to child care and subsidize the costs is still needed.

TRANSFORMATION, GLOBAL RE-BASING, AND BRAC

As the Base Realignment and Closure (BRAC) Commission prepares to receive DOD's list of installations recommended for realignment and closure, military beneficiaries are looking to Congress to ensure that key quality of life benefits and programs remain accessible. Members of the military community, especially retirees, are concerned about the impact base closures will have on their access to health care and the commissary, exchange, and MWR benefits they have earned. They are concerned that the size of the retiree, Guard, and Reserve populations remaining in a location will not be considered in decisions about whether or not to keep commissaries and exchanges open. In the case of shifts in troop populations because of Service transformation initiatives, such as Army modularity, or the return of servicemembers and families from overseas bases, community members at receiving installations are concerned that existing facilities and programs may be overwhelmed by the increased populations. NMFA does not have a position on whether or not downsizing overseas should occur or how or where troops should be based. Our interest in this discussion is in raising awareness of the imperative that military family and quality of life concerns be considered by policy-makers in their decision-making process and in the implementation of any rebasing or transformation plans.

Quality of life issues that affect servicemembers and families must be considered on an equal basis with other mission-related tasks in any plan to move troops or to close or realign installations. Maintaining this infrastructure cannot be done as an afterthought. Planning must include the preservation of quality of life programs, services, and facilities at closing installations as long as servicemembers and families remain AND the development of a robust quality of life infrastructure at the receiving installation that is in place before the new families and servicemembers arrive. Ensuring the availability of quality of life programs, services, and facilities at both closing and receiving installations and easing service members and families' transition from one to another will take additional funding and personnel. NMFA looks to Congress to ensure that DOD has programmed in the costs of family support and quality of life as part of its base realignment and closure calculations from the beginning and receives the resources it needs. DOD cannot just program in the cost of a new runway or tank maintenance facility; it must also program in the cost of a new child development center or new school, if needed.

STRONG FAMILIES ENSURE A STRONG FORCE

Mr. Chairman, NMFA is grateful to this subcommittee for ensuring funding is available for the vital quality of life components needed by today's force. As you consider the quality of life needs of servicemembers and their families this year, NMFA asks that you remember that the events of the past 3½ years have left this family force drained, yet still committed to their mission. Servicemembers look to their leaders to provide them with the tools to do the job, to enhance predictability, and to ensure that their families are cared for. Further, they look to their leaders to make sure their children are receiving a quality education and their spouses' career aspirations can be met. They look for signs from you that help is on the way, that their pay reflects the tasks they have been asked to do, and that their hard-earned benefits will continue to be available for themselves, their families, and their survivors, both now and into retirement.

Senator STEVENS. Our next witness is Donetta D'Innocenzo.

STATEMENT OF DONETTA D'INNOCENZO, PUBLIC POLICY COMMITTEE, THE LEUKEMIA & LYMPHOMA SOCIETY

Ms. D'INNOCENZO. D'Innocenzo, Mr. Chairman.

Senator STEVENS. Public Policy Committee of the Leukemia & Lymphoma Society. Thank you very much.

Ms. D'INNOCENZO. Mr. Chairman, Senator Inouye: My name is Donetta D'Innocenzo and I am pleased to appear today to testify on behalf of the Leukemia & Lymphoma Society. During its 56 year history, the society has been dedicated to finding a cure for blood-related cancers. That includes leukemia, lymphoma, and myeloma. The society has the distinction of being both the largest private organization dedicated to blood cancers and the Nation's second largest private cancer organization.

We are pleased to report that impressive progress is being made in the treatment of many blood cancers. Over the last 20 years there have been steady and impressive strides in the treatment of the most common form of childhood leukemia, and just 3 years ago a new therapy called Gleevec was approved for chronic myelogenous leukemia, which is a so-called targeted therapy that corrects the molecular defect that causes the disease and does so with few side effects.

The Leukemia & Lymphoma Society is proud to have played a role in the development of this lifesaving therapy, but our mission is far from complete. There is much work still to be done and we believe the research partnership between the public and private sectors, as represented in the Department of Defense's congressionally directed medical research program is an integral part of that effort and should be strengthened.

Hematological, or blood-related, cancers pose a serious health risk to all Americans. In 2005 more than 115,000 Americans will be diagnosed with a form of blood-related cancer and almost 56,000 will die. The Leukemia & Lymphoma Society, along with its partners, the Lymphoma Research Foundation and the Multiple Myeloma Research Foundation, believe this type of medical research is particularly important to the Department of Defense for a number of reasons.

First, research on blood-related cancers has significant relevance to the armed forces as the incidence of these cancers is substantially higher among individuals with chemical and nuclear exposure. Higher incidences of leukemia have long been substantiated in extreme nuclear incidents in both military and civilian populations, and recent studies have proven that individual exposure to chemical agents such as Agent Orange in the Vietnam war cause an increased risk of contracting lymphoid malignancies. In addition, bone marrow transplants were first explored as a means of treating radiation-exposed combatants and civilians following World War II.

Second, research in blood-related cancers has traditionally pioneered treatments in other malignancies. This research frequently represents the leading edge in cancer treatments that are later applied to other forms of cancer. Chemotherapy and bone marrow transplants are two striking examples of treatments first developed in the blood cancers.

From a medical research perspective, it is a particularly promising time to build a Department of Defense research effort focused on blood-related cancers. That relevance and opportunity were recognized over the last 4 years when Congress appropriated \$4.5 million annually, a total of \$18 million, to begin initial research into chronic myelogenous leukemia through the congressionally directed medical research program.

As members of the subcommittee know, a noteworthy and admirable distinction of the congressionally directed medical research program (CDMRP) is its cooperative and collaborative process that incorporates the experience and expertise of a broad range of patients, researchers, and physicians in the field. Since the chronic myelogenous leukemia (CML) program was announced, members of the society, individual patient advocates, and leading researchers have enthusiastically welcomed the opportunity to become a part of this program.

Unfortunately for us, \$4.5 million does not go very far in medical research. Recognizing that fact and the opportunity this research presents, a bipartisan group of 34 Members of Congress have requested that the program be modestly increased to \$15 million and be expanded to include all blood cancers, that is leukemias, lymphomas, and myeloma. This would provide the research community with the flexibility to build on the pioneering tradition that has characterized this field.

Department of Defense research on other forms of blood cancers addresses the importance of preparing for civilian and military exposure to weapons being developed by several hostile nations and to aid in the march to more effective treatment for all who suffer from these diseases.

We respectfully request inclusion of this in the 2006 legislation. Thank you.

[The statement follows:]

PREPARED STATEMENT OF DONETTA D'INNOCENZO

INTRODUCTION

I am pleased to appear before the subcommittee today and testify on behalf of The Leukemia & Lymphoma Society (LLS).

During its 56-year history, the Society has been dedicated to finding a cure for the blood cancers—leukemia, lymphoma, and myeloma. The Society has the distinction of being both the largest private organization dedicated to blood-related cancers and the Nation's second largest private cancer organization.

Our central contribution to the search for a cure is providing a significant amount of the funding for basic and translational research in the blood cancers. In 2005, we will provide approximately \$50 million in research grants. In addition to our role funding research, we provide a wide range of services to individuals with the blood cancers, their caregivers, families, and friends through our 63 chapters across the country. Finally, we advocate responsible public policies that will advance our mission of finding a cure for the blood cancers.

We are pleased to report that impressive progress is being made in the treatment of many blood cancers. Over the last two decades, there have been steady and impressive strides in the treatment of the most common form of childhood leukemia, and the survival rate for that form of leukemia has improved dramatically.

And just 3 years ago, a new therapy was approved for chronic myelogenous leukemia, a form of leukemia for which there were previously limited treatment options, all with serious side-effects. Let me say that more clearly, if 4 years ago your doctor told you that you had CML, you would have been informed that there were limited treatment options and that you should get your affairs in order. Today, those same patients have access to this new therapy, called Gleevec, which is a so-

called targeted therapy that corrects the molecular defect that causes the disease, and does so with few side effects.

LLS funded the early research on Gleevec, as it has contributed to research on a number of new therapies. We are pleased that we played a role in the development of this life-saving therapy, but we realize that our mission is far from complete. Many forms of leukemia, lymphoma and myeloma present daunting treatment challenges. There is much work still to be done, and we believe the research partnership between the public and private sectors—as represented in the Department of Defense's Congressionally Directed Medical Research Program—in an integral part of that effort and should be strengthened.

THE GRANT PROGRAMS OF THE LEUKEMIA & LYMPHOMA SOCIETY

The grant programs of the Society are in three broad categories: Career Development Grants, Translational Research Grants for early-stage support for clinical research, and Specialized Centers of Research. In our Career Development program, we fund Scholars, Special Fellows, and Fellows who are pursuing careers in basic or clinical research. In our Translational Research Program, we focus on supporting investigators whose objective is to translate basic research discoveries into new therapies.

The work of Dr. Brian Druker, an oncologist at Oregon Health Sciences University and the chief investigator on Gleevec, was supported by a translational research grant from the Society. Dr. Druker is certainly a star among those supported by LLS, but our support in this field is broad and deep. Through the Career Development and Translational Research Programs, we are currently supporting more than 500 investigators in 38 States and ten foreign countries.

Our new Specialized Centers of Research grant program (SCOR) is intended to bring together research teams focused on the discovery of innovative approaches to benefit patients or those at risk of developing leukemia, lymphoma, or myeloma. The awards will go to those groups that can demonstrate that their close interaction will create research synergy and accelerate our search for new therapies, prevention, or cures.

IMPACT OF HEMATOLOGICAL CANCERS

Despite enhancements in treating blood cancers, there are still significant research opportunities and challenges. Hematological, or blood-related, cancers pose a serious health risk to all Americans. These cancers are actually a large number of diseases of varied causes and molecular make-up, and with different treatments, that strike men and women of all ages. In 2005, more than 115,000 Americans will be diagnosed with a form of blood-related cancer and almost 56,000 will die from these cancers. For some, treatment may lead to long-term remission and cure; for others these are chronic diseases that will require treatments on several occasions; and for others treatment options are extremely limited. For many, recurring disease will be a continual threat to a productive and secure life.

A few focused points to put this in perspective:

- Taken together, the hematological cancers are fifth among cancers in incidence and second in mortality.
- Almost 700,000 Americans are living with a hematological malignancy in 2005.
- Almost 56,000 people will die from hematological cancers in 2005, compared to 40,000 from breast cancer, 30,200 from prostate cancer, and 56,000 from colorectal cancer.
- Blood-related cancers still represent serious treatment challenges. The improved survival for those diagnosed with all types of hematological cancers has been uneven. The 5-year survival rates are: Hodgkin's disease, 83 percent; Non-Hodgkin's lymphoma, 53 percent; Leukemias (total), 45 percent; Multiple Myeloma, 29 percent; Acute Myelogenous Leukemia, 14 percent.
- Individuals who have been treated for leukemia, lymphoma, and myeloma may suffer serious adverse events of treatment, including second malignancies, organ dysfunction (cardiac, pulmonary, and endocrine), neuropsychological and psychosocial aspects, and quality of life.

TRENDS

Since the early 1970's, incidence rates for non-Hodgkin's lymphoma (NHL) have nearly doubled.

For the period from 1973 to 1998, the death rate for non-Hodgkin's lymphoma increased by 45 percent, and the death rate for multiple myeloma increased by more than 32 percent. These increases occurred during a time period when death rates for most other cancers are dropping.

Non-Hodgkin's lymphoma and multiple myeloma rank second and fifth, respectively, in terms of increased cancer mortality since 1973.

Recent statistics indicate both increasing incidence and earlier age of onset for multiple myeloma.

Multiple myeloma is one of the top ten leading causes of cancer death among African Americans.

Despite the significant decline in the leukemia death rate for children in the United States, leukemia is still one of the two most common diseases that cause death in children in the United States.

Lymphoma is the third most common childhood cancer.

CAUSES OF HEMATOLOGICAL CANCERS

The causes of hematological cancers are varied, and our understanding of the etiology of leukemia, lymphoma, and myeloma is limited. Chemicals in pesticides and herbicides, as well as viruses such as HIV and EBV, play a role in some hematological cancers, but for most cases, no cause is identified. Researchers have recently published a study reporting that the viral footprint for simian virus 40 (SV40) was found in the tumors of 43 percent of NHL patients. These research findings may open avenues for investigation of the detection, prevention, and treatment of NHL. There is a pressing need for more investigation of the role of infectious agents or environmental toxins in the initiation or progression of these diseases.

IMPORTANCE TO THE DEPARTMENT OF DEFENSE

The Leukemia & Lymphoma Society, along with its partners in the Lymphoma Research Foundation and the Multiple Myeloma Research Foundation, believe this type of medical research is particularly important to the Department of Defense for a number of reasons.

First, research on blood-related cancers has significant relevance to the armed forces, as the incidence of these cancers is substantially higher among individuals with chemical and nuclear exposure. Higher incidences of leukemia have long been substantiated in extreme nuclear incidents in both military and civilian populations, and recent studies have proven that individual exposure to chemical agents, such as Agent Orange in the Vietnam War, cause an increased risk of contracting lymphoid malignancies. In addition, bone marrow transplants were first explored as a means of treating radiation-exposed combatants and civilians following World War II.

Secondly, research in the blood cancers has traditionally pioneered treatments in other malignancies. This research frequently represents the leading edge in cancer treatments that are later applied to other forms of cancer. Chemotherapy and bone marrow transplants are two striking examples of treatments first developed in the blood cancers.

From a medical research perspective, it is a particularly promising time to build a DOD research effort focused on blood-related cancers. That relevance and opportunity were recognized over the last 4 years when Congress appropriated \$4.5 million annually—for a total of \$18 million—to begin initial research into chronic myelogenous leukemia (CML) through the Congressionally Directed Medical Research Program (CDMRP). As members of the subcommittee know, a noteworthy and admirable distinction of the CDMRP is its cooperative and collaborative process that incorporates the experience and expertise of a broad range of patients, researchers and physicians in the field. Since the CML program was announced, members of the Society, individual patient advocates and leading researchers have enthusiastically welcomed the opportunity to become a part of this program and contribute to the promise of a successful, collaborative quest for a cure.

Unfortunately, \$4.5 million a year does not go very far in medical research. Recognizing that fact and the opportunity this research represents, a bipartisan group of 34 Members of Congress have requested that the program be modestly increased to \$15 million and be expanded to include all the blood cancers—the leukemias, lymphomas and myeloma. This would provide the research community with the flexibility to build on the pioneering tradition that has characterized this field.

DOD research on the other forms of blood-related cancer addresses the importance of preparing for civilian and military exposure to the weapons being developed by several hostile nations and to aid in the march to more effective treatment for all who suffer from these diseases. This request clearly has merit for inclusion in the fiscal year 2006 legislation.

The Leukemia & Lymphoma Society strongly endorses and enthusiastically supports this effort and respectfully urges the committee to include this funding in the fiscal year 2006 Defense Appropriations bill.

We believe that building on the foundation Congress initiated over the past 4 years would both significantly strengthen the CDMRP and accelerate the development of cancer treatments. As history has demonstrated, expanding its focus into areas that demonstrate great promise; namely the blood-related cancers of leukemia, lymphoma and myeloma, would substantially aid the overall cancer research effort and yield great dividends.

Senator STEVENS. We try each year to do our best on this. These are very serious diseases and you have the great support of members of this subcommittee. Whether we have the money to do it is getting to be another matter. But we will do our best. Thank you very much.

Ms. D'INNOCENZO. Thank you, Mr. Chairman.

Senator STEVENS. Senator Inouye.

Senator INOUE. No, thank you.

Senator STEVENS. Our next witness is Patricia Goldman, President Emeritus, and Ian Volvner, Ovarian Cancer National Alliance. Good afternoon.

STATEMENTS OF:

**PATRICIA GOLDMAN, PRESIDENT EMERITUS, ON BEHALF OF THE
OVARIAN CANCER NATIONAL ALLIANCE**

**IAN VOLVNER, ON BEHALF OF THE OVARIAN CANCER NATIONAL
ALLIANCE**

Ms. GOLDMAN. Thank you, Mr. Chairman and Senator Inouye. I am here today representing the Ovarian Cancer National Alliance along with Ian Volvner. We are a patient-led organization and we are here to give you our personal perspectives on this and our activities.

I am a very lucky lady. I am a 12 year survivor of ovarian cancer, and I suppose it is unusual to say you are lucky to have had a cancer, but in my case, where in ovarian cancer over half of the people who get this every year do not survive the 5-year mark with this.

One should not have to be lucky to survive ovarian cancer, and one of the things we are very grateful for for the research program that I am here to support is the progress we are beginning to make. Unlike breast, colon, cervical, there is no detection test that is applied for ovarian cancer. One of the things you may have seen in recent news accounts—and these have grown directly out of the research that has come from that—are the announcements of various biomarkers. We are not there yet, but it is exciting that the research is beginning to promise that has come out of this program that there may be a way if we keep at this to detect ovarian cancer.

As a further example, we formed this organization 8 years ago. A third of the founding board members, all in their 50s, have succumbed to the disease. So I think you get a sense of where we are with this.

Despite, as I mentioned, the terrible toll, we are beginning to make some progress. I am privileged, in addition, to serve on, have served on both the scientific review panels and the peer review panels of this very well managed program, in which case the patient advocates, the scientists, and the clinical physician sit together to review the programs. We have begun to find not only the markers, but some clinical evidence that can be applied. So we are very grateful for this program, and we respectfully request that the

program be continued as it has been in the form, both with the request of \$50 million for this.

I will submit the rest of my examples for the record if I may, and I thank you for that. I will turn to Mr. Volvner to have Ian give you his perspective on this from his own experience.

Senator STEVENS. Please do.

Mr. VOLVNER. Mr. Chairman, Senator Inouye: I am here today because my family—

Senator STEVENS. Would you pull the mike up toward you, please.

Mr. VOLVNER. I am here today because my family is a two-time survivor of ovarian cancer. You do not know the terrible toll that this insidious disease takes on a family, and I cannot begin to try to explain it to you. What I can tell you is that the very real gains that Pat Goldman referred to that have been made as a result of the research performed under the Defense Department's cancer research program, ovarian cancer research program, made our second tour of duty, if you will, considerably easier than the first time my wife incurred this dreadful disease.

The funding request that the Ovarian Cancer National Alliance has made is very modest. It is \$15 million. The returns in terms of the relief of burden on the social system, on the health care program, on our country, are enormous, and in simple human terms. I really do not know that my wife would be here but for this program.

So we thank you very much and we ask for your continued support of this very important but very modest financial program. Thank you.

[The statements follow:]

PREPARED STATEMENT OF THE OVARIAN CANCER RESEARCH PROGRAM

STATEMENT OF IAN D. VOLNER

Mr. Chairman and members of the committee, my name is Ian Volner, and I am a lawyer here in Washington, DC. Over the years, I have testified in my professional capacity before Congress on numerous occasions on a variety of public issues. This is only the second time I have testified in my personal capacity. On both occasions, I have appeared before this subcommittee to thank you for your support of the Department of Defense (DOD) Ovarian Cancer Research Program (OCRP) and urge your continued support. I do so because my wife, Martha, our two sons, and I have "survived" ovarian cancer—not once, but twice.

The purpose of my testimony is to assure you that the monies you invested in the DOD Ovarian Cancer Research Program over the past 9 years have been wisely spent. We ask, therefore, that the funding level for this vital and very successful program be set at \$15 million for fiscal year 2006.

I first testified in support of the OCRP before the subcommittee in May of 2000. Two weeks later, Martha was diagnosed, for the second time, with ovarian cancer. Our first battle with this insidious disease occurred in 1994. At that time, Martha's cancer was not detected until a very advanced stage; her chances of living 5 years was less than 1 in 3, and our sons were aged 13 and 10. Despite the odds, Martha survived due to the skill and dedication of her physicians and, in no small measure, because of their courage and hers. In 1994, the diagnostic tools were imprecise, unreliable and costly. The chemotherapy Martha underwent was designated as experimental, and its efficacy and side effects were not well understood.

The situation was measurably different when Martha was diagnosed with ovarian cancer for the second time, in late May of 2000. It was clear even then that the research being done under the auspices of this appropriation was bearing fruit. While the diagnostic tools were still imprecise, the medical professional better understood the strengths and weaknesses of the available tools. Treatment options had also improved. Thus, while skill, dedication and courage were still vitally important

to Martha's survival of her second bout with ovarian cancer, it was clear to our family that the research conducted by the OCRP was beginning to have effects, both in its own terms and, no less importantly, in fostering the development of a sustained commitment to ovarian cancer research.

While the OCRP has been funded at a constant level for the past 3 fiscal years, progress in diagnostics and treatment of ovarian cancer has been made. For example, research funded by the OCRP has resulted in the identification of new biomarkers that have the potential to alert doctors to the presence of ovarian cancer at an early stage. This could mean that in the future, women will not be exposed to the risks of late stage diagnosis as my wife was in 1994. Similarly, because of research funded by the OCRP, new and more effective treatments for this insidious disease are in development. In the future, women should not have to undergo the long and exhausting chemotherapy regime that Martha was subjected to in 1994.

There has been little or no improvement in the survival rate for women who are diagnosed at a late stage. This disease moves with daunting speed, and the mortality rates are alarming. Due to the funding limits for this program, many research projects rated as outstanding or excellent have not been funded. Even a modest increase in funding would help to further the progress that has been made.

When the subcommittee views the work that has been accomplished by the program in our written statements, I am sure it will agree that the money Congress appropriates for OCRP is being well spent. In some, perhaps immeasurable but nonetheless clear way, Martha is with us today—and is able to attend the graduation of each of her sons (now 24 and 21) from college—thanks to this program. The human, economic and social returns of the modest investment in this program are enormous. As a proxy for the millions of women who will benefit from that investment, I urge the committee to appropriate \$15 million for the Ovarian Cancer Research Program for fiscal year 2006.

I want to thank the members of the subcommittee for the opportunity to testify at this important hearing today. I know it has been a long day for you. I am ready to answer any questions you may have.

STATEMENT OF PATRICIA GOLDMAN

Senator Stevens, members of the subcommittee on Defense Appropriations, I am here today representing the Ovarian Cancer National Alliance (the Alliance), a patient-led organization that works to increase public and professional understanding of ovarian cancer and advocates for increased resources to support research on more effective ovarian cancer diagnostics and treatments. I thank you for the opportunity to submit comments for the record and to give you my very personal perspective on the program you are reviewing.

I am a very lucky lady. I am a 12-year survivor of ovarian cancer—the deadliest of all gynecologic cancers. I am lucky because I am one of the rare women whose cancer was detected in an early and curable stage. Currently, more than half of the women diagnosed with ovarian cancer will die within 5 years of diagnosis. Therefore, I am here representing thousands of women who could not be here. One shouldn't have to be "lucky" to survive ovarian cancer.

Because of extensive research and generous, sustained Federal investments, it is possible to diagnose and successfully treat many forms of cancer like breast, colon and prostate. Unfortunately, that is not yet the case for ovarian cancer. There is no screening test for ovarian cancer and few standard treatments. Federal programs for ovarian cancer continue to receive flat line funding for their already minimal budgets. In the 8 years since the Alliance was founded, a third of our founding board members have died and three more are being treated for a recurrence of their disease.

The discouragement of this death toll is balanced by the hope engendered by the progress we are making through research to fulfill the mandate of the program you are reviewing today. Because of the Federal investment in the DOD Ovarian Cancer Research Program, researchers are identifying the mechanisms by which ovarian cancer is initiated in the body and how the disease spreads. The research community is also tantalizingly close to identifying a reliable and easily administered screening test, an achievement that could dramatically impact survival rates.

I have been privileged to serve as a patient advocate on both the scientific and peer review panels for this program. One of the program's mandates is to attract new researchers to the field, and it has been encouraging to see the increase in the numbers of young research scientists who are dedicating themselves to ovarian cancer research. Yet, as a reviewer, I have been discouraged to see an expanding number of worthwhile research proposals that have been unfunded due to flat funding for the program over the past 3 years.

In the testimony I am submitting for the record, I have recounted the accomplishments of this excellent program. I believe the program has followed Congress's directives directly and completely, which makes a strong case for it to be continued. For that reason the Alliance respectfully requests the subcommittee to provide \$15 million for the program in fiscal year 2006. Thank you, Senator.

OVARIAN CANCER NATIONAL ALLIANCE STATEMENT FOR THE RECORD

Ovarian Cancer's Deadly Toll

According to the American Cancer Society, in 2005, more than 22,000 American women will be diagnosed with ovarian cancer, and approximately 16,000 will lose their lives to this terrible disease. Ovarian cancer is the fourth leading cause of cancer death in women. Currently, more than half of the women diagnosed with ovarian cancer will die within 5 years. Among African American women, only 48 percent survive 5 years or more. When detected early, the 5-year survival rate increases to more than 90 percent, but when detected in the late stages, as are most diagnoses, the 5-year survival rate drops to 28 percent.

Today, it is both striking and disheartening to see that despite progress made in the scientific, medical and advocacy communities, ovarian cancer mortality rates have not significantly improved during the past decade, and a valid and reliable screening test—a critical tool for improving early diagnosis and survival rates—still does not yet exist for ovarian cancer. Behind the sobering statistics are the lost lives of our loved ones, colleagues and community members. While we have been waiting for the development of an effective early detection test—thousands of our sisters have lost their battle to ovarian cancer.

Women should not have to rely on luck for their survival. Research must continue on this disease through all possible avenues, building a comprehensive knowledge of its symptoms, causes and treatments. All women should have access to treatment by a specialist. All women should have access to a valid and reliable screening test. We must deliver new and better treatments to patients and the health care professionals who treat them. The Ovarian Cancer Research Program at DOD has begun to tackle the multiple gaps in our knowledge of this deadly disease, providing a growing baseline understanding of ovarian cancer.

The Ovarian Cancer Research Program at the Department of Defense

Over the past 9 years, Congress has appropriated funds to support the Ovarian Cancer Research Program at DOD, which is modeled after the successful breast cancer program first included in the DOD budget in 1992. The Ovarian Cancer Research Program supports innovative, integrated, multidisciplinary research efforts that will lead to better understanding, detection, diagnosis, prevention, and control of ovarian cancer. The program shares the Alliance's mission and objective of reducing and preventing—and eventually—eliminating ovarian cancer.

Awards made by the Ovarian Cancer Research Program are designed to stimulate research that will attract new investigators into the field, challenge existing paradigms, and support collaborative ventures, including partnerships with private and public institutions. Research awards are determined using a two-tier review process of peer and programmatic review that ensures scientific merit and attainment of program goals. The two-tier process is the hallmark of the Congressional Directed Medical Research Programs (CDMRP) and increasingly has served as a model for research programs throughout the world. Another important element in the execution of the Ovarian Cancer Research Program is the collaboration of advisors from the scientific, clinical, and consumer communities in the program. These advisors provide important guidance regarding funding strategies and serve on both levels of review.

In addition, the Ovarian Cancer Research Program has developed a funding strategy to complement awards made by other agencies and has taken steps to ensure that the duplication of long-term basic research supported by the National Institutes of Health is avoided. Importantly the program offers several awards that specifically seek to fill gaps in ongoing research and complement initiatives sponsored by other agencies.

Like all of the CDMRP Programs at DOD, the Ovarian Cancer Research Program serves as an international model in administrative efficiency for research programs. Integrating the latest technology and communications, the Ovarian Cancer Research Program only has a 5.64 percent management cost. The program has a quick turnaround time of 6 months from the initial proposal review (including two-tier review), to distribution of funds to investigators—speeding up the process of study concept to research conclusion.

Scientific Achievements of the Ovarian Cancer Research Program

Since its inception, the Ovarian Cancer Research Program at DOD has developed a multidisciplinary research portfolio that encompasses etiology, prevention, early detection/diagnosis, preclinical therapeutics, quality of life, and behavioral research projects. The Ovarian Cancer Research Program strengthens the Federal Government's commitment to ovarian cancer research and supports innovative and novel projects that propose new ways of examining prevention, early detection and treatment. The program also attracts new investigators into ovarian cancer research and encourages proposals that address the needs of minority, elderly, low-income, rural and other commonly underrepresented populations.

The program's achievements have been documented in numerous ways, including 131 publications in professional medical journals and books; 169 abstracts and presentations given at professional meetings; and six patents, applications and licenses granted to awardees of the program. The program has also introduced and supported 33 new investigators in the field of ovarian cancer research.

Investigators funded through the Ovarian Cancer Research Program have yielded several crucial breakthroughs in the study of prevention and detection, including:

- Recognition of the role of the progestins, hormonal components found in oral contraceptives, as a key agent in reducing the risk of ovarian cancer;
- Identification of several new biomarkers that have the potential to alert health care providers to the presence of early stage ovarian cancer, and be used to develop an early detection tool which would significantly improve early detection and survival; and
- Discovery of three new agents that inhibit tumor growth and spreading, as well as new blood vessel formation (angiogenesis)—a development that will result in new and more effective treatments.

Increased Investment Needed

In fiscal year 2005, the Ovarian Cancer Research Program received 222 proposals, but due to resource limitations, was only able to fund 17 awards. The program has received \$10 million for the past 3 years and when inflation is taken into account, the allocation of \$10 million actually represents an overall diminished level of funding. With new funding, the Ovarian Cancer Research Program can support new grants, provide funding to promising young investigators, and allocate additional resources to grants that should be extended or renewed.

The Ovarian Cancer Research Program has helped leverage and maximize both public and private sector funding. Awardees have cited DOD support as an impetus for the maturation of clinical trials, which led to an increase of locally funded ovarian cancer grants.

The fiscal year 1998-fiscal year 2003 awards have led to the recruitment of more than 33 new investigators into the ovarian cancer research field. Additionally, the Fox Chase Cancer Center in Philadelphia and the Fred Hutchinson Cancer Research Center in Seattle reported that the progress made during the first year of their DOD Program Project Awards enabled both institutions to successfully compete for National Cancer Institute SPORes (Specialized Programs of Research Excellence) Awards to fund additional long-term ovarian cancer research.

Despite progress made, we still do not fully understand the risks factors, symptoms and causes of ovarian cancer. No effective screening tool exists to detect the disease at early stages and the devastating mortality rates remain the same year after year. The DOD Ovarian Cancer Research Program is developing science and scientists to help us achieve the necessary breakthroughs desperately needed in the field of ovarian cancer. Biomedical research—particularly in such insidious and complex conditions as ovarian cancer—requires a sustained, long-term investment and commitment in order to make significant gains. The investment the Congress and the DOD have made in the Ovarian Cancer Research Program to date is appreciated and has helped move the field forward; however, without new resources the program will be unable to maintain the status quo—let alone continue to reap benefits from previous and current Federal investments.

Summary and Conclusion

As an umbrella organization with 46 State and local groups, the Alliance unites the efforts of more than 500,000 grassroots activists, women's health advocates, and health care professionals to bring national attention to ovarian cancer. As part of this effort, the Alliance advocates sustained Federal investment in the Ovarian Cancer Research Program at DOD. The Alliance respectfully requests the subcommittee to provide \$15 million for the program in fiscal year 2006.

The Alliance maintains a longstanding commitment to work with Congress, the administration, and other policymakers and stakeholders to improve the survival

rate from ovarian cancer through education, public policy, research, and communication. Please know that we appreciate and understand that our Nation faces many challenges, and Congress has limited resources to allocate; however, we are concerned that without increased funding to bolster and expand ovarian cancer research efforts, the Nation will continue to see growing numbers of women losing their battle with this terrible disease. Thank you for your consideration of our views and for supporting increased funding for the DOD Ovarian Cancer Research Program in fiscal year 2006.

On behalf of the entire ovarian cancer community—patients, family members, clinicians and researchers—we thank you for your leadership and support of Federal programs that seek to reduce and prevent suffering from ovarian cancer.

Material in this testimony was partly taken from the Congressionally Directed Medical Research Program's Ovarian Cancer program Web site at <http://cdmrp.army.mil>.

Senator STEVENS. Thank you very much. We appreciate your testimony.

Senator Inouye.

Senator INOUE. Most people do not realize this, but a very significant number of Members of the Senate or members of their immediate family have been afflicted by this terrible, terrible disease one way or the other.

Ms. GOLDMAN. I am aware. I did not specify this in particular, but we all know in fact one of the Senators' wife is experiencing a recurrence again of her disease, which I am sure is what you are referring to.

Senator STEVENS. Despite differences, it is a very close family. We all know that.

Ms. GOLDMAN. Indeed.

Senator STEVENS. Thank you very much.

Ms. GOLDMAN. Thank you.

Senator STEVENS. The next witness is Brigadier General Stephen Koper, President of the National Guard Association. It is nice to have you back, General.

STATEMENT OF BRIGADIER GENERAL STEPHEN KOPER, U.S. AIR FORCE (RETIRED), PRESIDENT, NATIONAL GUARD ASSOCIATION OF THE UNITED STATES

General KOPER. I thank you, Mr. Chairman. Chairman Stevens, members of the subcommittee, thank you for this opportunity to testify today. You have always been champions of the citizen-soldier and citizen-airman and the National Guard Association (NGAUS) thanks you for your many years of outstanding support. This subcommittee is well versed in the contributions being made by the members of the National Guard in Operation Iraq, Afghanistan, and the global war on terror.

As the Secretary of Defense has said repeatedly, the war on terror could not be fought without the National Guard. Battles would not be won, peace would not be kept, and sorties would not be flown without the citizen-soldier and citizen-airmen. We are asking on their behalf for the resources necessary to allow them to continue to serve the Nation.

At the top of that list of resources is access to health care. The National Guard Association believes every member of the National Guard should have the ability to access TRICARE coverage on a cost-share basis regardless of duty status. While we are encouraged by the establishment of TRICARE Reserve Select, which is a pro-

gram where members earn medical coverage through deployments, we do not believe it goes far enough.

Health care coverage for our members is a readiness issue. If the Department of Defense expects Guard members to maintain medical readiness, then it follows that they should also have access to health care. As you know, when a National Guardsman is called to full-time duty he or she is expected to report ready for duty. Yet studies show that a significant percentage of our members do not have access to health care. Making TRICARE available to all members of the National Guard on a cost-share basis would provide a solution to this problem and it would finally end the turbulence visited on soldiers and their families who are forced to transition from one health care coverage to another each time they answer the Nation's call.

In addition to addressing readiness concerns, access to TRICARE will also be a strong recruitment and retention incentive. In an increasingly challenging recruitment and retention environment, TRICARE could make a significant difference. Part-time civilian Federal employees are eligible to participate in Federal health insurance programs. NGAUS believes that National Guard members should receive at a minimum the opportunity afforded to other Federal part-time employees.

Another issue of serious concern is full-time manning for the Army National Guard. For many years the Army National Guard full-time manning has been funded at approximately 58 percent of the validated requirements. All other Reserve components are manned at significantly higher levels. Recognizing this disparity, Congress, the Army, and the Army National Guard agreed to increase the Army Guard's full-time manning to a level of 71 percent by 2012. This increase was to be obtained through gradual increases in Active Guard and Reserve (AGR) and technician end strength. However, the wars in Iraq and Afghanistan have further exacerbated the problem as it is the full-time staff that bears the bulk of the increased workload associated with mobilization.

Consequently, we believe acceleration in the ramp is warranted. NGAUS believes there is a requirement to reach the 71 percent full-time level by 2010 versus the current target of 2012. This would require an increase in fiscal year 2006 of \$12 million for an additional 292 AGRs and \$6.2 million for 195 military technicians. Obviously, our ultimate goal is to reach 100 percent of validated requirements, and sooner rather than later.

NGAUS is also very concerned about equipment for the Army National Guard. When Army National Guard gets deployed to Iraq they deploy with their equipment. In most cases this equipment remains in theater when the unit returns home. The end result is that units cannot adequately train for the next rotation and they may not be equipped to meet an emergency at home, whether it is a natural disaster or terrorist act.

High on the priority list of Army Guard equipment shortfalls is the Humvee. The Army National Guard is critically short more than 13,000 of the nearly 42,000 vehicles required. In Alaska the Army Guard has only 62 of the 151 vehicles required, leaving the State 41 percent short of requirements.

The current President's budget request does not fully address the National Guard shortfall. Also, we understand there is money for Humvees in the supplemental, but it is not clear how much of the funds will go to provide equipment for the Army National Guard. NGAUS urges Congress to continue to support funding for Humvees and to ensure that the Army takes the needs of the Guard into consideration while procuring these vehicles. NGAUS also encourages the subcommittee to continue to support the procurement of up-armored Humvees for the Guard. While the Army has made a valiant commitment to procure armored Humvees for use in theater, we also recognize the need for up-armored vehicles for the homeland defense mission. Congress needs to provide additional earmarked funds to guarantee continued armored vehicle production.

Army Guard aviation is also a top priority. The extremely high operational tempos of our Operation Enduring Freedom and Iraqi Freedom have increased the demand for aviation assets. For Guard units, aviation assets are also critical for many State missions. HH-60 medevac units continue to have the highest operational tempo of any fixed wing or rotary aircraft in theater today and NGAUS requests the committee favorably consider funding the UH-60s and medevac aircraft.

Mr. Chairman, I submitted testimony earlier and I have revised my closing remarks and I would like to skip to that now if I may. In closing, I will address a serious concern we have regarding the Air Force Future Total Force, FTF, concept. With the release of DOD's BRAC list on May 13, our worst fears for the future of the Air National Guard have been confirmed. The Future Total Force was developed over the course of the last 2 years, cloaked in secrecy, and it did not include the adjutants general from its inception.

When reports of the direction and scope of the Air Force plan began to surface in the Guard community, the adjutants general individually and collectively expressed their concerns. Those concerns were dismissed. The adjutants general were finally admitted collectively to the process in October 2004.

Concurrently, the 2005 BRAC process provided an opportunity, again secure from scrutiny and debate, for the Air Force to carry out a reduction of fighter, transport, and tanker force structure in the Air National Guard without benefit of a detailed follow-on mission plan. It even spawned a new category of BRAC action for the Air National Guard called "enclaved." In layman's terms, that means the unit aircraft have been removed but the personnel will either stay, commute to a new base, or leave the force.

Now the challenge of airing out the full impact of FTF has been dumped on the doorstep of the Congress and the BRAC Commission. Our concerns include the question as to whether the 2005 BRAC will meet the requirements of the 2005 quadrennial defense review (QDR), or will the QDR merely be written to support the BRAC? Why not offer the continued upgrade of F-15 and F-16 aircraft and their systems that will have relevance well into the 2020s as an informed alternative to increased buys of new weapons platforms?

The enclaved units will threaten our ability to maintain a skilled and stable workforce. While the active Air Force can routinely move its personnel assets to follow its weapons systems, we see the potential for severe personnel losses because of their traditional ties to a community. It is the cornerstone of the militia.

Our members fully understand the need to modernize the Air Force, but we want to make sure that it is done in a prudent manner that will best protect the interests of the Nation. We will continue to urge the Congress and the BRAC Commission to closely scrutinize these initiatives to ensure that decisions regarding Air National Guard force structure are based on sound strategic principles.

Mr. Chairman, members of the subcommittee, I sincerely thank you for your time today and I am happy to answer any questions. Senator STEVENS. Thank you very much.

[The statement follows:]

PREPARED STATEMENT OF BRIGADIER GENERAL (RET.) STEPHEN M. KOPER

Chairman Stevens, members of the committee, thank you for this opportunity to testify today. You have always been champions of the citizen soldier and citizen airman and the National Guard Association thanks you for your many years of outstanding support.

This committee is well versed in the contributions being made by members of the National Guard in operations in Iraq, Afghanistan and the Global War on Terror. As the Secretary of Defense has said repeatedly, "The War on Terror could not be fought without the National Guard". Battles would not be won, peace would not be kept and sorties would not be flown without the citizen soldier and citizen airman. We are asking on their behalf for the resources necessary to allow them to continue to serve the Nation.

At the top of that list of resources is access to health care. The National Guard Association believes every member of the National Guard should have the ability to access TRICARE coverage, on a cost-share basis, regardless of duty status.

While we are encouraged by the establishment of TRICARE Reserve Select, which is a program where members "earn" medical coverage through deployments, we don't believe it goes far enough. Healthcare coverage for our members is a readiness issue. If the Department of Defense expects Guard members to maintain medical readiness, then it follows that they should also have access to healthcare. As you know, when a National Guardsman is called to full time duty, he or she is expected to report "ready for duty". Yet, studies show that a significant percentage of our members do not have access to healthcare. Making TRICARE available to all members of the National Guard, on a cost-share basis, would provide a solution to this problem. And, it would finally end the turbulence visited on soldiers and their families who are forced to transition from one healthcare coverage to another each time they answer the Nation's call.

In addition to addressing readiness concerns, access to TRICARE would also be a strong recruitment and retention incentive. In an increasingly challenging recruiting/retention environment, TRICARE could make a significant difference. Part-time civilian Federal employees are eligible to participate in Federal health insurance programs. NGAUS believes that National Guard members should receive, at a minimum, the opportunity afforded other Federal part-time employees.

Currently in the Senate, Senator Lindsey Graham and Senator Hillary Clinton, have co-sponsored a bill which would provide TRICARE, on a cost-share basis, to every member of the National Guard. NGAUS fully supports this bill, and asks the members of the committee to do the same by including the cost for this program in the Appropriations mark-up.

Another issue of serious concern is full time manning for the Army National Guard. For many years the Army National Guard full time manning has been funded at approximately 58 percent of the validated requirements. All other reserve components are manned at significantly higher levels.

Recognizing this disparity, the Congress, the Army and the Army National Guard agreed to increase the Army Guard's full time manning to a level of 71 percent by 2012. This increase was to be attained through gradual increases in AGR and technician end strength.

However, the wars in Iraq and Afghanistan have further exacerbated the problem since it is the full time staff that bears the brunt of the increased work load associated with mobilization. Consequently, we believe acceleration in the ramp is warranted.

The National Guard Association of the United States believes there is a requirement to reach the 71 percent full-time manning level by 2010 versus the current target of 2012. This would require an increase in fiscal year 2006 of \$12 million for an additional 292 AGRs and \$6.2 million for 195 military technicians. Obviously, our ultimate goal is to reach 100 percent of validated requirements and sooner, rather than later.

NGAUS is also very concerned about equipment for the Army National Guard. When Army National Guard units deploy to Iraq, they deploy with their equipment. In most cases, this equipment remains in theater when the unit returns home. The end result that units cannot adequately train for the next rotation, and they may not be equipped to meet an emergency at home, whether it is a natural disaster or terrorist attack.

High on the priority list of Army Guard equipment shortfalls is the HMMWV. The ARNG is critically short 13,581 of the nearly 42,000 vehicles required. In Alaska, the Army Guard has only 62 of the 151 vehicles required, leaving the State 41 percent short of its requirements. The current President's Budget request does not fully address the National Guard's shortfall. Also, we understand there is money for HMMWVs in the supplemental but it is not clear how much of the funds will go to provide equipment for the Army National Guard. The National Guard Association of the United States urges the Congress to continue to support funding for HMMWVs and to insure that the Army takes the needs of the Guard into consideration when procuring these vehicles.

NGAUS also encourages the committee to continue to support the procurement of Up-Armored HMMWVs for the Guard. While the Army has made a valiant commitment to procure Up-Armored HMMWVs for use in theater, we also recognize a need for Up-Armored vehicles for the Homeland Defense mission. Congress needs to provide additional earmarked funds to guarantee continued armored vehicle production until all deployed combat units have properly armored vehicles and Army National Guard Up-Armored HMMWV requirements inside the United States are backfilled.

Army Guard aviation is also a top priority. The extremely high operational tempos of Operation Enduring Freedom and Operation Iraqi Freedom have increased the demand for aviation assets while the environment and enemy conditions have reduced the number of aircraft. For Guard units, aviation assets are also critical for many State missions. HH-60 MEDEVAC units continue to have the highest operational tempo of any fixed wing or rotary aircraft in theater today.

NGAUS requests that the committee favorably consider funding for UH-60s and MEDEVAC aircraft.

On the Air Guard side, our equipment needs are also directly tied to operations in Iraq and Afghanistan. As you know, the C-130 is the workhorse of the Air Force, and a large segment of that force resides in the Air National Guard. These aircraft are vulnerable to enemy attack when flying in hostile areas. One of the primary threats is the proliferation of shoulder fired infrared missiles.

LAIRCM, Large Aircraft Infrared Countermeasures, would provide added protection from infrared missiles to C-130 crews flying in hostile areas. We are requesting \$34.5 million for LAIRCM for the ANG C-130 fleet.

Thanks to the Congress, one of the greatest Air Guard success stories is the procurement of targeting pods for fighter aircraft. Money added by the Congress over the past several years has enabled the Air Guard to be on the front line of air operations in Iraq. To continue this successful program, we are requesting an appropriation for an additional 15 pods in fiscal year 2006.

This committee has always been particularly sensitive to the equipment needs of the National Guard and generous in funding the National Guard and Reserve Equipment Account. Mr. Chairman, each and every dollar that has been appropriated over the years in the account has purchased combat capability. This account is absolutely essential to both the Army and Air National Guard and we thank you for your continued support of NGREA.

Chairman Stevens, I've highlighted some of the top procurement items which are urgently needed by the Army Guard and the Air Guard, but unfortunately, that is not an exhaustive list. Your professional staff has graciously agreed to meet with us and we will discuss additional Guard equipment requirements with them.

In closing, I will address a serious concern we have regarding the Air Force's Future Total Force concept. We urge the Congress to closely scrutinize this initiative to ensure that decisions regarding Air National Guard force structure are based on sound strategic principles.

Over the past several years, the Congress has wisely invested money in upgrading the Air Guard's F-16 fleet to keep it relevant well into the 2020's. Faced with a growing deficit and a turbulent world, it seems imprudent to send capable aircraft to the bone yard. Yet, this is what we fear the Air Force is planning to do when in fact we believe they should be fully utilizing all the resources which the tax payers have already funded.

The Air National Guard has been at the forefront of providing the air defense of the Nation, as well as playing a major role in the Air Expeditionary Force. Yet, the Air Force has not fully addressed how it will meet these mission requirements with a significantly reduced Air Guard fighter force.

NGAUS believes the Air Force should provide details to the Congress on how it intends to meet critical national defense requirements at the same time it plans to drawdown significant amounts of Air Guard fighter force structure.

Our members fully understand the need to modernize the Air Force, but we want to make sure that it is done in a prudent manner that will best protect the interests of national defense. We hope that Congress will continue to ask the Air Force for more details as the plan unfolds.

Mr. Chairman, members of the committee, I sincerely thank you for your time today and am happy to answer any questions.

Senator STEVENS. Senator Bond has come in, General, and I want to recognize Senator Bond. He came particularly on notice that we gave him you would be here.

Senator BOND. Thank you very much, Mr. Chairman, Senator Inouye. I had an Intelligence hearing, but this was so important, and I very much appreciate your having Brigadier General Koper, President of the National Guard Association, speaking out about his concerns relating to the BRAC report.

As you know from previous sessions we have had with the Secretary of Defense and the chief, Joint Chiefs of Staff, the Chairman of the Joint Chiefs of Staff, I had concerns prior to the release and now I think what General Koper has just cited is something that should be read by every Member of the United States Congress. When he said the Future Total Force was developed over the course of the last 2 years cloaked in secrecy and did not include the adjutants general from its inception, well, I think that is accurate. It appears that the Pentagon had its mind made up, and there are very, very significant implications for maintaining the civilian force, the civilian fighters that we have so often relied on and now rely on for 50 percent of the force in Iraq.

As I said, I raised these concerns 2 months ago. Unfortunately, those concerns and the concerns expressed by the Guard leaders were ignored. The result is a BRAC list that is absolutely stunning. It will eliminate over one-third of the Air Guard's aviation assets. In the tactical air forces (TACAIR) alone there would be 12 F-16 wings and 3 F-15 wings gone, poof. It would adversely impact, as the General said, community basing concept the Guard relies so heavily upon in recruiting and retention. In an area that I do not know that we have adequately touched on, it would adversely compromise our Nation's ability to defend the skies over our homeland, because it ignores the very significant role that the Air National Guard provides in the homeland defense mission, specifically the conduct of Operation Noble Eagle.

Finally, I think it shortsightedly undermines the Air Guard's proven, effective, and invaluable expeditionary role. If we continue to shortchange the Guard, if we treat them as an unwanted stepchild, particularly in this Future Total Force of our air assets—and I made a Freudian slip last hearing when I called it a "feudal total

force." I did not mean to do that, but unfortunately my words have appeared to come true.

I have asked the chairman of the BRAC Commission to hold a hearing in St. Louis, where I hope to discuss the shortfalls of the Pentagon's BRAC plan and try to work with my colleagues who also share my concern about and commitment to the National Guard, the Pentagon's plan irreparably harming the Air National Guard.

Mr. Chairman, I would just pose one question to the General if it is appropriate now.

Senator STEVENS. Yes, sir.

Senator BOND. In your view, General, were Guard leaders allowed a substantive role in the planning of the Future Total Force strategy, and if not what is the impact on the Guard of the BRAC process? What are your conclusions from these actions and the results?

General KOPER. Mr. Chairman, Senator Bond, as I said in my closing remarks, it is the view of the adjutants general that collectively they were not included in the development of the Future Total Force from its inception. They were fed bits and pieces, and not until October 2004 did they manage to get some regular representation in the general officer steering committee on Future Total Force.

With respect to BRAC, the BRAC, as I also earlier indicated, is by its very nature a process which deals in confidentiality. The adjutants general were not a player in the gathering of facts with respect to units of the Army and Air National Guard.

I would say this to you, however. The Army National Guard, as all of you are well aware, is loaded down with terribly outdated facilities in armories across the country. The Army National Guard and the Army full well recognize that the military construction process is never going to be able to solve that issue. The Army and the Army National Guard have come up with a rather creative plan to utilize the BRAC process to close and consolidate a large number of those kinds of installations. It probably makes good sense.

So with respect to the Army National Guard, I believe there was at least some long-term general conversations between State adjutants general about Army National Guard facilities, not an official part of the BRAC process because they don't have an active role in that.

On the Air National Guard side, the adjutants general that I have spoken to since the release of the list on Friday are finding out things that of course they did not know. So we have only had since Friday to determine the full impact of that, but we will be continuing to do that.

Senator STEVENS. Thank you very much.

Senator Inouye.

Senator INOUE. I am glad to learn that they consulted with the Army National Guard.

General KOPER. You bet. And I would add, sir, that as a former blue suiter I am a little embarrassed. We have had a reputation for a great relationship and we are at a total loss to determine why this has come about.

Senator STEVENS. Yes, General, and we are at a loss to understand how this relates to the Total Force Concept, this movement of forces to the South and to the East, particularly with the almost denuding of the forces that face the Pacific. Very difficult for us to understand. We intend to go into it pretty deeply here soon. We have some other problems ahead of us right now, but as soon as we can start scheduling some hearings we are going to schedule some hearings on this process and listen to some people.

I am not sure there is much we can do about it, now the BRAC process has started, except to try to enlighten the BRAC people themselves. I think we should do that.

So we thank you for your contribution.

General KOPER. Thank you, Mr. Chairman.

Senator STEVENS. Our next witness is Mary Ann——

Ms. GUERRA. Guerra.

Senator STEVENS. Guerra, thank you. Vice President, Research Operations, for Translational——

Ms. GUERRA. Genomics Research Institute, TGen. We call it “TGen” for short.

Senator STEVENS. My eyes hurt today. Maybe you can tell me a little bit of research about that.

STATEMENT OF MARY ANN GUERRA, SENIOR VICE PRESIDENT FOR RESEARCH OPERATIONS, TRANSLATIONAL GENOMICS RESEARCH INSTITUTE, ON BEHALF OF THE NATIONAL PROSTATE CANCER COALITION

Ms. GUERRA. Good afternoon, Mr. Chairman, Senator Inouye. It is a pleasure to be here this afternoon. Thank you for your time.

I enthusiastically offer testimony on behalf of the National Prostate Cancer Coalition. From 1994 to 2001 I served as the Deputy Director for Management of the National Cancer Institute (NCI), where I watched this prostate cancer program grow, launch, and flourish. I also recently served on the congressionally sponsored Institute of Medicine panel that was asked to evaluate alternative funding strategies that could leverage DOD research programs.

My organization, TGen, is a leading private sector biomedical research institute focused on identifying genes that can quickly be translated into diagnostics and therapeutics to serve the American public to improve health. Thus, these combined career experiences have made me a congressionally directed medical research program (CDMRP) convert and a strong supporter of the prostate cancer research program (PCRP), because they fill a research niche that is not served by other programs, including the NCI.

These programs achieve two important objectives. First, they provide innovative programs that support early stage high risk and novel research. They also fund programs that specifically support the translation of discoveries into products that improve lives. The translational component is an essential and sometimes missing ingredient in the discovery to bedside process. You might find it astonishing that while the rate of R&D spending at the NIH and in pharma has gone up since 1993, the number of new drug applications has gone down. In simple words, discoveries are not being translated into drugs that serve the people of the United States.

These principles of translation and acceleration govern the venture research sponsored by the PCRP in its relentless effort to

change the course of prostate cancer, the most commonly diagnosed non-skin cancer and the second leading cause of cancer death in men. The facts are in 2005, 232,000 men will be diagnosed with prostate cancer. They will join the 2 million men already diagnosed. Over 30,000 of these men will die of cancer this year.

African-Americans will be harder hit, with occurrence rates nearly 65 percent greater and death rates 2.5 times greater than Caucasian men.

The Veterans Administration estimates that there are roughly 24.7 million male veterans living in the United States. The impact of percent on them? 4.1 million veterans will be diagnosed with prostate cancer in their lifetime. Nearly 5,000 patients in the VA system will be diagnosed with prostate cancer this year.

A recent scientific study has also shown that cancer rates are increased among service men who were in Southeast Asia and that men whose assignments averaged more than the normal, the average tour of duty, are at a greater risk of prostate cancer.

But let me bring this even closer to home. The Department of Defense estimated that the direct costs of prostate cancer on the military were expected to exceed \$42 million in 2004 and nearly 85 percent of the 1.4 million individuals serving in America's military are men. The impact? 200,000 service men will be diagnosed with prostate cancer. The DOD, America's largest company, must be prepared to protect its employees from the killer that will affect 14 percent of their workforce.

Thanks to your vision and leadership, the CDMRP has become the gold standard for conducting and administering cancer research. To effectively fight this war on prostate cancer and to leverage your already earlier investments, the committee must appropriate \$100 million for the PCRP. Without such an investment, the translation pipeline remains closed and this investment in the valuable research already funded will not be translated into discoveries that are used in the lab—in the clinic.

Two years ago this subcommittee requested that the DOD, in consultation with the Institute of Medicine, evaluate opportunities for public and private sector funding collaborations to reduce the burden of Federal appropriations for the CDMRP. Those of us who served on that committee found that there are no new funding sources because these programs fund research that is not funded by the private sector. Our panel found that we have—this program has been efficiently and effectively managed, with only a 6 percent overhead rate. They have created novel funding mechanisms for that early and translational research that is not being done in other institutions. They have been scientifically productive and they play an important role in the national health research enterprise.

The Prostate Cancer Research Foundation conference is a great example of a private-public partnership. This panel brings together all Government people that are working on cancer research along with their private counterparts. This parent consumer research group looks for innovation in translation rather than funding small incremental science that is sometimes funded in other agencies. As co-conveners of this conference, the PCRP helps establish priorities.

For this conference to be successful, Federal agencies engaged in cancer research should be required to participate in this conference, and we are asking that you lend your leadership to make this participation required. We need more leveraging of the existing resources and a broader and more active engagement of our Federal agencies to accomplish this important objective. No one institution, scientific discipline, or business sector is solely equipped to fully translate discoveries into products. Government, academia, and industry must be brought together to solve these complex problems that are affecting our Nation and our families. Moreover, Congress must encourage them to cooperate together.

Mr. Chairman, Senator Inouye, we have done remarkable work and are making progress. I urge you to continue to support an enhanced growth of PCRP, a program that is efficient, is driven by scientific priorities, and is scientifically productive.

The war on prostate cancer must be funded appropriately so researchers can get new drugs to patients who need them most. For this to happen, the PCRP needs \$100 million in fiscal year 2006 and I respectfully request that you appropriate this need.

Thank you for the time and I would be glad to answer any questions.

Senator STEVENS. Thank you very much.

Senator INOUE. Thank you.

[The statement follows:]

PREPARED STATEMENT OF MARY ANN GUERRA

Mr. Chairman and members of the Senate Defense Appropriations Subcommittee, good morning. My name is Mary Ann Guerra, and I am Senior Vice President for Operations at the Translational Genomics Research Institute (TGen) in Phoenix, Arizona, a not-for-profit research enterprise. From 1994 until 2001, I served as Deputy Director for Management at the National Cancer Institute, and I am thoroughly familiar with the prostate cancer research effort and portfolio at the NCI. During my time at NCI, I watched the Department of Defense Congressionally Directed Medical Research Program (CDMRP) in prostate cancer grow and flourish since its inception at Fort Detrick in 1997. I also served on the Institute of Medicine (IOM) panel that Congress asked to evaluate leveraging strategies for funding of DOD peer reviewed medical research programs in order to reduce the burden on Federal appropriations. While our IOM panel did not include a formal evaluation of the CDMRP programs, I can tell you that I was very impressed by their scope and breadth—doing what parallel research efforts the NCI cannot do, and serving as a crucial part of this Nation's biomedical research effort to beat serious, often life threatening diseases. I must say, my past experience at NCI and NIH, my recent experience in the private sector, and the knowledge gained through participating in the IOM review, made me a convert and strong supporter of the CDMRP. Consequently, I am particularly pleased to offer testimony on behalf of the National Prostate Cancer Coalition, supporting an appropriation of \$100 million for the CDMRP Prostate Cancer Research Program (PCRP) for fiscal year 2006.

My organization, TGen, is among the world's leading private sector biomedical research institutes. It strives to make and quickly translate genomic discoveries into diagnostic and therapeutics that improve the health of all Americans. Our prostate cancer research program, headed by Dr. John Carpten, uses cutting edge technology to search for genes predisposing to prostate cancer, particularly among special populations including African American men, the population hardest hit by this devastating disease. Using information generated from mapping the human genome, coupled with our technology, TGen can now conduct large family and population based studies not possible before. With the patient who suffers from disease as our focus, TGen is guided by three core principles: integration, translation and acceleration. We integrate the best and brightest scientists across disciplines to attack disease; we hasten the translation of research discoveries into meaningful therapies; and, through our academic, health and industry partnerships, we accelerate our research goals on behalf of those who need them most.

The same kinds of principles govern venture research sponsored by the PCRP in its effort to change the course of prostate cancer, the nation's most commonly diagnosed nonskin cancer and the second leading cause of cancer death among men. In 2005, the American Cancer Society has estimated that more than 232,000 men will hear physicians tell them, "You have prostate cancer," as they join the nearly 2 million Americans who already have the disease. Sadly, over 30,000 men will lose their lives to prostate cancer this year. Although the wider use of early detection along with changes in early treatment likely account for the near 100 percent survival of men with localized disease, too many men are still diagnosed with advanced disease, particularly at younger ages (in their 40's and 50's), too many men suffer advanced recurrences after an earlier successful treatment, and too many ultimately face no cure.

However hard prostate cancer may hit among white families, it is regularly a tragedy in African American communities. Prostate cancer occurrences rates are nearly 65 percent higher among black Americans and death rates are nearly 2½ times greater than those of Caucasian men. Research dollars directed at special populations is not a high priority as evidenced by the overall funding expended on such studies.

The Department of Veterans Affairs (VA) estimates that there are roughly 24.7 million male veterans living in the United States. That means at least 4.1 million veterans will be diagnosed with prostate cancer at some point during their lifetimes. The Veterans Health Administration currently estimates that nearly 5,000 patients in its system are diagnosed with prostate cancer each year. While evidence is not conclusive, it appears that America's servicemen, who stood in harm's way for their country in the Asian theater and were directly exposed to Agent Orange, may be at double the risk for prostate cancer. Moreover, a recent scientific study has shown that cancer rates are increased among men who were in uniform in Southeast Asia, even if they were not directly involved in spraying herbicides, and that men who had longer than average tours of duty in the Asian theater may be at particular risk of prostate cancer. With our brave men in uniform in mind, I am asking you today to take care of all of them, past, present and future.

The Department of Defense estimated the direct health care costs of prostate cancer on the military were expected to be over \$42 million in fiscal year 2004. Nearly 85 percent of the current 1,465,000 individuals serving in America's military are men. That means about 200,000 servicemen will be diagnosed with prostate cancer—without the additional consideration of service related environmental factors, like Agent Orange exposure, that may increase occurrences of the disease. The DOD refers to itself as America's largest company; it must therefore be prepared to protect its employees from a killer that will affect 14 percent of its workforce.

Whether in battle or peacetime, the lives of men from coast to coast depend on your decisions. You have the unique opportunity to provide a brighter future for millions of men and families through continued and expanded prostate cancer research. With proper funding we can find a way to end the pain and suffering caused by this disease.

To effectively fight the war on prostate cancer for America's families, your committee must appropriate \$100 million for the PCRP. As stated in its fiscal year 1997 business plan, PCRP needs at least \$100 million to conduct human clinical trials research. Without that appropriation, the program is unable to test new treatments and get those new products to patients that could retard the course of their disease and improve the quality of their lives. Without such an investment, the translational pipeline remains closed, meaning that valuable prostate cancer research remains stuck in laboratories instead of at work in clinics.

Thanks to your vision and leadership, CDMRP has become the gold standard for administering cancer research. Prostate cancer advocates and scientists throughout this Nation have long applauded the program and its peer and consumer driven approach to research. PCRP is a unique program within the government's prostate cancer research portfolio because it makes use of public/private partnerships, awards competitive grants for new ideas, does not duplicate the work of other funders, integrates scientists and survivors and uses a unique perspective to solve problems. Its mission and its results are clear. The program fills a niche that other Federal research programs do not. It funds research with the end in mind; funding science that advances solutions that will change the lives of the people who are diagnosed with this disease. Each year, the program issues an annual report detailing what it has done with taxpayer dollars to battle prostate cancer. PCRP's transparency allows people affected by prostate cancer and people in the consumer research community to clearly see what our government is doing to fight the disease.

Two years ago, this committee requested that DOD, in consultation with the Institute of Medicine, evaluate opportunities for public and private sector funding col-

laborations to reduce the burden of Federal appropriations for CDMRP—and maintain or improve efficiencies, throughput and outcomes for its research programs. Those of us who served on the IOM task force determined that, on the whole, there are no new funding sources for CDMRP that would enhance its overall research effort, because the redirection of dollars would reduce the work those dollars provide in some other part of the research universe. While it was not part of our charge, we also had an opportunity to appreciate the special contribution that the CDMRP makes to the research landscape.

Our panel noted that despite initial respect for the primacy of NCI, skepticism about CDMRP in the scientific community, its location in DOD and the participation of consumers in peer review and priority setting, the program has been efficiently and effectively managed, scientifically productive and a valuable component of the Nation's health research enterprise. CDMRP's distinctive program features include its rigorous peer review of proposals for scientific merit and program relevance by outside reviewers—including consumers; its inclusive priority setting process; its emphasis on exploratory high-risk/high-gain basic, translational, and clinical research projects and on research capacity building; and its holding of periodic national meetings to share results among the investigators and with the program's constituencies. It can also do what NCI cannot, speedily evaluate proposed projects and rapidly change focus as research discoveries offer new opportunities to America's scientific community. CDMRP is a terrific reflection of a well-proved maxim: "Give the Army a problem, and you'll soon have a solution." The Army simply gets things done in a thorough and novel manner.

The CDMRP structure is based on a model developed by an earlier IOM report. Its mission and its philosophy for awarding research grants reflect that of DOD's Defense Advanced Research Projects Agency (DARPA). The DARPA model, performance through competition and innovation, was specifically praised in President Bush's fiscal year 2005 budget. This DARPA-esque approach to cancer research allows PCRP to identify novel research with large potential payoffs and to focus on innovative methods that do not receive funding elsewhere. This is an essential element of the research enterprise, that needs to be expanded, not contracted.

One of the strongest aspects of the program is PCRP's Integration Panel. The panel is composed of those who know prostate cancer research and the issues facing it: scientists, researchers, and prostate cancer survivors. This peer and consumer driven model allows the program to select grants based on merit and their translational benefit while incorporating the views of those who need research the most, prostate cancer patients. It funds research that encourages innovation rather than research that incrementally answers small scientific questions. No other publicly funded cancer research entity effectively brings together all those with a stake in curing prostate cancer.

Perhaps the best example of public-private partnerships in prostate cancer research is the Prostate Cancer Research Funders Conference. That panel brings together representatives of all the government agencies that fund prostate cancer research along with their counterparts in the private sector. Participants include NIH/NCI, DOD, the Veterans Health Administration, the Centers for Disease Control and Prevention, the Food and Drug Administration, Canadian and British government agencies, private foundations/organizations and representatives from industry. Members of the Conference have come together to focus on shared objectives and address commonly recognized barriers in research.

As a co-convenor of the conference, PCRP plays an important role in shaping its priorities. Currently, Federal agencies participate voluntarily, but they can opt in or out based on the tenure of executive leadership. For the conference to be successful, Federal agencies engaged in prostate cancer research should, in my opinion, be required to participate, and we ask for your leadership to make that happen. We need to see more leveraging of existing resources and a broader engagement of Federal agencies can help accomplish this important objective. Moreover, Congress must also offer sufficient incentives for the private sector to participate. However, these incentives must not compromise the autonomy or integrity of PCRP's peer review structure. I firmly believe that a collaborative, multifaceted approach to prostate cancer research can bring about better results in a more timely fashion. No one Institution is equipment to fully translate discoveries into products; government, academia and industry must be brought together to solve these very difficult and complex problems that face our Nation and our families. Mr. Chairman, we have done remarkable work and are making progress. Public-private collaboration and new scientific discoveries are moving us toward a better understanding of how prostate cancer kills, but, for our work to be worthwhile, it must be translated into tangible goals and results for patients.

I urge you to continue to support and enhance growth of PCRP, a program that is efficient, driven by scientific priorities and scientifically productive. The War on Prostate Cancer must be funded appropriately so researchers can get new drugs to patients who need them most. For this to happen, PCRP needs \$100 million in fiscal year 2006, and I respectfully request that you appropriate this need.

Senator STEVENS. Our next witness is Captain Robert Hurd and Chief Petty Officer Michael Silver of the United States Naval Sea Cadet Corps.

**STATEMENT OF CAPTAIN ROBERT C. HURD, U.S. NAVY (RETIRED)
ACCOMPANIED BY CHIEF PETTY OFFICER MICHAEL SILVER, UNITED
STATES NAVY SEA CADET CORPS**

Captian HURD. Good afternoon, Senators.

Senator STEVENS. Yes, sir.

Captain HURD. It is my pleasure today to have Chief Petty Officer Michael Silver present our testimony. Just as a little bit of background, out of 10,000 young men and women in the Naval Sea Cadet Corps, about 50 a year attain the rank of chief petty officer. So it is quite a significant accomplishment. We have him for about 1 more month before he joins the Marine Corps upon graduation from high school.

Senator STEVENS. Good.

Nice to have you.

Mr. SILVER. Thank you, sir. Good afternoon, Mr. Chairman, Senator Inouye. I am a chief petty officer. I am with a battalion based in the naval base in Ventura County in California. I also go to El Camino Real High School in Woodland Hills.

I am honored to represent over 10,000 Sea Cadets across the Nation, and also 2,000 adult volunteers in the program. We are a congressionally chartered youth development and education program whose main goals are to develop young men and women while promoting interest and skills in seamanship, aviation, construction, and other military fields. We instill a sense of patriotism, commitment, self-reliance, along with the Navy's core values, honor, courage, and commitment. We also take pride in molding strong moral character and self-discipline in a drug- and gang-free environment.

Many young people join our program for our hands-on experience. We try to maximize our opportunities as much as possible all throughout the program with the armed services and also the civilian workforce. Our program over any other youth program, over Reserve Officer Training Corps (ROTC), Sea Scouts, Boy Scouts, Devil Pups, we have the most in-depth program that is offered outside of school.

We have the most hands-on experience. We were out there with the actual Navy, with the actual Marine Corps, the Air Force, different services. We go on the bases. There is no other program that is offered that goes in depth as we do. We go on Navy ships, on Coast Guard ships. I personally have been—I participated in basic airman's training where it is pretty much I am on a ground crew, on Navy aircraft. I have been to medical training. I worked at a naval hospital for 2 weeks. I have worked in the emergency room (ER).

I have been to a leadership academy. I learned pretty much how to be a successful leader to others and stuff like that. I have also been to field training, which is pretty much on the Marine Corps

aspect of it; field ops aviation school in Maryland. I have also been to an international exchange with the Her/His Majesty's Ship (HMS) Bristol in England, where I was there with Swedish, Canadian, South Korean, Chinese, and Australian, because the Sea Cadets is also an international program and they were there with over 50 other people from different other countries.

Also, there are 473 former Sea Cadets now attending the U.S. Naval Academy and approximately 400 former cadets annually enlist in the armed services. These prescreened, highly motivated and well prepared young people have shown that prior Sea Cadet experience is an excellent indicator of high career success rate, both in and out of the military. Whether or not we choose a military career, we also carry forth the forged values of good citizenship, leadership, and moral courage that we believe will benefit our country and us as well.

The corps is particularly sensitive that no young person is denied access to the program because of economic status, as for the most part we are responsible for our own expenses, which can amount to an average of \$500 without outside assistance per cadet per year. Federal funds have been used to help offset the cadets' out of pocket training costs. However, for a variety of reasons current funding can no longer adequately sustain the program and we respectfully ask you to consider and support funding that will allow for the full amount of \$2 million requested for the next fiscal year.

Thank you for the opportunity to speak today and I and the entire Sea Cadet Corps appreciate your support for this fine program that has meant so much to myself over the past 7 years and which will continue to influence me for the rest of my life. I would just like to thank you, and I am open to questions.

[The statement follows:]

PREPARED STATEMENT OF CAPTAIN ROBERT C. HURD

REQUEST

Navy had originally requested full funding at the \$2,000,000 level in their fiscal year 2006 budget submission. This was in response to last year's Senate/House conference committee language urging them to include the NSCC in their fiscal year 2006 request. Navy initially budgeted these funds at the \$2,000,000 level but subsequently deleted this funding to meet an imposed budget mark. Subsequent negotiations with Navy after the President's Budget had been submitted have resulted in a verbal promise to fund the NSCC in fiscal year 2006 at the fiscal year 2005 appropriated level of \$1,700,000—to be funded from existing budget lines. Because this action occurred after the budget submission, no separate line item exists for NSCC and because it was originally funded (Before the mark), no Unfunded Requirements List item was submitted.

It is respectfully requested that \$300,000 be appropriated for the NSCC in fiscal year 2006, so that when added to the promised \$1,700,000 will restore full funding at the \$2,000,000 level. Further, in order to codify the Navy's promised commitment and to ensure future funding, consideration of including the following conference language is requested: "Congress is pleased to learn that Navy has agreed to fund the U.S. Naval Sea Cadet Corps in the fiscal year 2006 budget as urged by the Senate and House in the 2005 Defense Budget Conference Report. Conferees include an additional \$300,000 for the U.S. Naval Sea Cadet Corps, that when added to the \$1,700,000 in the fiscal year 2006 budget request will fund the program at the full \$2,000,000 requested. Conferees urge the Navy to continue to fund this program in the fiscal year 2007 budget request and out years."

BACKGROUND

At the request of the Department of the Navy, the Navy League of the United States established the Naval Sea Cadet Corps in 1958 to "create a favorable image of the Navy on the part of American youth." On September 10, 1962, the U.S. Congress federally chartered the Naval Sea Cadet Corps under Public Law 87-655 as a non-profit civilian youth training organization for young people, ages 13 through 17. A National Board of Directors, whose Chairman serves as the National Vice President of the Navy League for Youth Programs, establishes NSCC policy and management guidance for operation and administration. A full-time Executive Director and small staff in Arlington, Virginia administer NSCC's day-to-day operations. These professionals work with volunteer regional directors, unit commanding officers, and local sponsors. They also collaborate with Navy League councils and other civic, or patriotic organizations, and with local school systems.

In close cooperation with, and the support of, the U.S. Navy and U.S. Coast Guard, the Sea Cadet Corps allows youth to sample military life without obligation to join the Armed Forces. Cadets and adult leaders are authorized to wear the Navy uniform, appropriately modified with a distinctive Sea Cadet insignia.

There are currently over 368 Sea Cadet units with a program total of 10,980 participants (2,204 adult Officers and Instructors and 8,776 Cadets (about 33 percent female).

NSCC OBJECTIVES

- Develop an interest and skill in seamanship and seagoing subjects.
- Develop an appreciation for our Navy's history, customs, traditions and its significant role in national defense.
- Develop positive qualities of patriotism, courage, self-reliance, confidence, pride in our Nation and other attributes, which contribute to development of strong moral character, good citizenship traits and a drug-free, gang-free lifestyle.
- Present the advantages and prestige of a military career.

Under the Cadet Corps' umbrella is the Navy League Cadet Corps (NLCC), a youth program for children ages 11 through 13. While it is not part of the Federal charter provided by Congress, the Navy League of the United States sponsors NLCC. NLCC was established " . . . to give young people mental, moral, and physical training through the medium of naval and other instruction, with the objective of developing principles of patriotism and good citizenship, instilling in them a sense of duty, discipline, self-respect, self-confidence, and a respect for others."

BENEFITS

Naval Sea Cadets experience a unique opportunity for personal growth, development of self-esteem and self-confidence. Their participation in a variety of activities within a safe, alcohol-free, drug-free, and gang-free environment provides a positive alternative to other less favorable temptations. The Cadet Corps introduces young people to nautical skills, to maritime services and to a military life style. The program provides the young Cadet the opportunity to experience self-reliance early on, while introducing this Cadet to military life without any obligation to join a branch of the armed forces. The young Cadet realizes the commitment required and routinely excels within the Navy and Coast Guard environments.

Naval Sea Cadets receive first-hand knowledge of what life in the Navy or Coast Guard is like. This realization ensures the likelihood of success should they opt for a career in military service. For example, limited travel abroad and in Canada may be available, as well as the opportunity to train onboard Navy and Coast Guard ships, craft and aircraft. These young people may also participate in shore activities ranging from training as a student at a Navy hospital to learning the fundamentals of aviation maintenance at a Naval Air Station.

The opportunity to compete for college scholarships is particularly significant. Since 1975, over 178 Cadets have received financial assistance in continuing their education in a chosen career field at college.

ACTIVITIES

Naval Sea Cadets pursue a variety of activities including classroom, practical and hands-on training as well as field trips, orientation visits to military installations, and cruises on Navy and Coast Guard ships and small craft. They also participate in a variety of community and civic events.

The majority of Sea Cadet training and activities occurs year round at a local training or "drill" site. Often, this may be a military installation or base, a reserve center, a local school, civic hall, or sponsor-provided building. During the summer,

activities move from the local training site and involve recruit training (boot camp), “advanced” training of choice, and a variety of other training opportunities (depending on the Cadet’s previous experience and desires).

SENIOR LEADERSHIP

Volunteer Naval Sea Cadet Corps officers and instructors furnish senior leadership for the program. They willingly contribute their time and effort to serve America’s youth. The Cadet Corps programs succeed because of their dedicated, active participation and commitment to the principles upon which the Corps was founded. Cadet Corps officers are appointed from the civilian sector or from active, reserve or retired military status. All are required to take orientation, intermediate and advanced Officer Professional Development courses to increase their management and youth leadership skills. Appointment as an officer in the Sea Cadet Corps does not, in itself, confer any official military rank. However, a Navy-style uniform, bearing NSCC insignia, is authorized and worn. Cadet Corps officers receive no pay or allowances. Yet, they do derive some benefits, such as limited use of military facilities and space available air travel in conjunction with carrying out training duty orders.

DRUG-FREE AND GANG-FREE ENVIRONMENT

One of the most important benefits of the Sea Cadet program is that it provides participating youth a peer structure and environment that places maximum emphasis on a drug and gang free environment. Supporting this effort is a close liaison with the U.S. Department of Justice Drug Enforcement Administration (DEA). The DEA offers the services of all DEA Demand Reduction Coordinators to provide individual unit training, as well as their being an integral part of our boot camp training program.

Among a variety of awards and ribbons that Cadets can work toward is the Drug Reduction Service Ribbon, awarded to those who display outstanding skills in the areas of leadership, perseverance and courage. Requirements include intensive anti-drug program training and giving anti-drug presentations to interested community groups.

TRAINING

Local Training

Local training, held at the unit’s drill site, includes a variety of activities supervised by qualified Sea Cadet Corps Officers and instructors, as well as Navy, Coast Guard, Marine and other service member instructors.

Cadets receive classroom and hands on practical instruction in basic military requirements, military drill, water and small boat safety, core personal values, social amenities, drug/alcohol abuse, cultural relations, naval history, naval customs and traditions, and nautical skills. Training may be held onboard ships, small boats or aircraft, depending upon platform availability, as well as onboard military bases and stations. In their training, cadets also learn about and are exposed to a wide variety of civilian and military career opportunities through field trips and educational tours.

Special presentations by military and civilian officials augment the local training, as does attendance at special briefings and events throughout the local area. Cadets are also encouraged, and scheduled, to participate in civic activities and events to include parades, social work, and community projects, all part of the “whole person” training concept.

For all Naval Sea Cadets the training during the first several months is at their local training site, and focuses on general orientation to, and familiarization with, the entire Naval Sea Cadet program. It also prepares them for their first major away from home training event, the 2 weeks recruit training which all Sea Cadets must successfully complete.

The Navy League Cadet Corps training program teaches younger cadets the virtues of personal neatness, loyalty, obedience, courtesy, dependability and a sense of responsibility for shipmates. In accordance with a Navy orientated syllabus, this education prepares them for the higher level of training they will receive as Naval Sea Cadets.

Summer Training

After enrolling, all sea cadets must first attend a 2-week recruit training taught at the Navy’s Recruit Training Command, at other Naval Bases or stations, and at regional recruit training sites using other military host resources. Instructed by Navy or NSCC Recruit Division Commanders, cadets train to a condensed version of the basic course that Navy enlistees receive. The curriculum is provided by the

Navy, and taught at all training sites. In 2004 there were 19 Recruit training classes at 18 locations, including 1 class conducted over the winter holiday school break. These 18 nationwide regional sites are required to accommodate the increased demand for quotas and also to keep cadet and adult travel costs to a minimum. Over 2500 Naval Sea Cadets attended recruit training in 2004, supported by another 230 adult volunteers.

Once Sea Cadets have successfully completed recruit training, they may choose from a wide variety of advanced training opportunities including basic/advanced airman, ceremonial guard, seamanship, sailing, amphibious operations, leadership, firefighting and emergency services, submarine orientation, seal and mine warfare operations, Navy diving, and training in occupational specialties including health care, legal, music, master-at-arms and police science, and construction.

The Naval Sea Cadet Corps is proud of the quality and diversity of training opportunities offered to its Cadet Corps. For 2004 approximately 8,000 training opportunities were formally advertised for both cadets and adults. Another 600 opportunities presented themselves through the dedication, resourcefulness and initiative of the adult volunteer officers who independently arranged training for cadets onboard local bases and stations. This locally arranged training represents some of the best that the NSCC has to offer and includes the consistently outstanding training offered by the U.S. Coast Guard. The total cadet and adult opportunity for 2004 stood at about 8,500 quotas, including all recruit training. Approximately 7,800 NSCC members, with about 7,050 being cadets, stepped forward and requested orders to take advantage of these training opportunities. Cadets faced a myriad of challenging and rewarding training experiences designed to instill leadership and develop self-reliance. It also enabled them to become familiar with the full spectrum of Navy and Coast Guard career fields.

This steady and continuing participation once again reflects the popularity of the NSCC and the positive results of Federal funding for 2001 through 2004. The NSCC continues to experience increased recruit and advanced training attendance of well over 2,000 cadets per year over those years in which Federal funding was not available. While the Global War On Terrorism (GWOT) following the events of 9/11 has continued to preclude berthing availability at many bases and stations, the NSCC maintained its strength and opportunity for cadets as other military hosts offered resources in support of the NSCC. While recruit training acquaints cadets with Navy life and Navy style discipline, advanced training focuses on military and general career fields and opportunities, and also affords the cadets many entertaining, drug free, disciplined yet fun activities over the entire year. Approximately 400–500 cadets per year further confirm the program's popularity by performing multiple 2-week trainings, taking maximum advantage of the opportunities presented. The NSCC also remains proud that approximately 9 percent of the midshipman brigade at the U.S. Naval Academy report having been prior Naval Sea Cadets, most citing summer training as a key factor in their decision to attend the USNA.

Training Highlights for 2004

The 2004 training focus was once again on providing every cadet the opportunity to perform either recruit or advanced training during the year. To that end emphasis was placed on maintaining all traditional and new training opportunities developed since federal funding was approved for the NSCC. These include classes in sailing and legal (JAG) training, expanded SEAL orientation opportunity, SCUBA classes, more seamanship training onboard the NSCC training vessels on the Great Lakes, and additional honor guard training opportunities. Other highlights included:

- Maintained national recruit training opportunity for every cadet wanting to participate with 19 evolutions in 2004.
- In spite of escalating costs and increased competition for base resources, kept cadet summer training cost at only \$40 per week, an increase of only \$10 per week per cadet for all training.
- Continued NSCC's expanded use of Army and State National Guard facilities to accommodate demand for quotas for recruit training.
- Completed total rewrites and updates of the NSCC Officer Professional Development Courses for all adults and implemented programs for reducing adult volunteer out of pocket participation expenses, dramatically improving the quality and extent of training for adult volunteers.
- Expanded NSCC cadet training with Navy Explosive Ordnance Disposal/Mobile Diving Salvage Units to include West Coast opportunities in addition to the training in Norfolk, Virginia.
- Expanded SEAL training opportunities beyond NSCC's traditional two annual classes to include an additional class with the Navy's Special Warfare Combat Craft (SWCC) units in Norfolk.

- Developed and instituted the first ever Air Traffic Control training class at NAS, Kingsville, TX.
- Maintained double the number of MAA classes and cadets taking this training since 9/11.
- Implemented first ever opportunity for culinary arts training for cadets onboard the USS Kiluea T-AE-26 at Alameda, CA in support of traditional seamanship training annually conducted onboard that MSC ship.
- Re-instituted at Naval Hospital Great Lakes NSCC's unique class for advanced medical "First Responder" training.
- Expanded opportunities for music training beyond traditional training with the Navy's School of Music in Norfolk, VA to include training with the Atlantic Fleet Band in Jacksonville, FL.
- Expanded and conducted NSCC's first advanced seamanship class for outstanding cadets at the Massachusetts Maritime Academy at Buzzards Bay, MA.
- For all adults volunteering to be escorts for summer training, implemented the first ever and only program for reducing volunteer out of pocket expenses. An extremely modest program designed to offset travel cost only (15 cents a mile with a mileage cap) it has promoted improved program commitment among NSCC's adult volunteers and alleviated critical shortages of adult escorts for summer training.
- Maintained expanded YP training on the Great Lakes, with 5 underway cruises in 2004.
- Continued to place cadets onboard USCG Barque Eagle for multiple 3-week underway orientation cruises.
- Continued to place cadets aboard USCG stations, cutters, and tenders for what each year proves to be among the best of the training opportunities offered in the NSCC.
- Again conducted the popular, merit based, International Exchange Program for 2004, expanded to include the Asian opportunities in Hong Kong and Korea that were suspended in 2003 due to the SARS concern. Included Australia in the program for 2004.
- Maintained attendance at NSCC Petty Officer Leadership Academies, (POLA) at approximately 280 cadets.
- Placed cadets onboard USN ships under local orders as operating schedules and opportunity permitted, to include for 12 cadets a 60+ day transit and homeport relocation of the USS Ronald Reagan from Norfolk to San Diego via the Straits of Magellan.
- And as in all prior years, again enjoyed particularly outstanding support from members of the United States Navy Reserve, whose help and leadership remain essential for summer training.

INTERNATIONAL EXCHANGE PROGRAM (IEP)

For 2004 the NSCC continued again for the third year its redesigned and highly competitive, merit based, and very low cost to the cadet, International Exchange Program. Cadets were placed in Australia, United Kingdom, Sweden, Netherlands, Hong Kong, Korea, and Bermuda to train with fellow cadets in these host nations. The NSCC and Canada maintained their traditional exchanges in Nova Scotia and British Columbia, and the NSCC hosted visiting cadets in Norfolk and at Fort Lewis, WA for 2 weeks of U.S. Navy style training.

NAVY LEAGUE CADET TRAINING

In 2004, approximately 1,400 Navy League cadets and escorts attended Navy League Orientation Training at 17 sites nationwide. Participation in 2004 was very much like 2003. The diversity in location and ample quotas allowed for attendance by each and every League cadet who wished to attend. Approximately 270 League cadets and their escorts attended Advanced Navy League training where cadets learn about small boats and small boat safety using the U.S. Coast Guard's safe boating curriculum. Other advanced Navy League training sites emphasize leadership training. Both serve the program well in preparing League cadets for further training in the Naval Sea Cadet Corps, and particularly for their first "boot camp." The continuing strong numbers of participants for both Orientation and Advanced training, support not just the popularity of the NSCC program but also the positive impact the Federal training grant has had in helping cadets afford the training and helping them take advantage of the increased opportunities available to them.

SERVICE ACCESSIONS

The Naval Sea Cadet Corps was formed at the request of the Department of the Navy as a means to “enhance the Navy image in the minds of American youth.” To accomplish this, ongoing presentations illustrate to Naval Sea Cadets the advantages and benefits of careers in the armed services, and in particular, the sea services.

While there is no service obligation associated with the Naval Sea Cadet Corps program, many Sea Cadets choose to enlist or enroll in Officer training programs in all the Services.

Annually, the NSCC conducts a survey to determine the approximate number of Cadets making this career decision. This survey is conducted during the annual inspections of the units. The reported Cadet accessions to the services are only those that are known to the unit at that time. There are many accessions that occur in the 2–3 year timeframe after Cadets leave their units, which go unreported. For example, for the year 2000, with about 83 percent of the units reporting, the survey indicates that 510 known Cadets entered the armed forces during the reporting year ending December 31, 2000. Of these, 30 ex-Sea Cadets were reported to have received appointments to the U.S. Naval Academy. Further liaison with the USNA indicates that in fact, there are currently 472 Midshipmen with Sea Cadet backgrounds—almost 9 percent of the entire Brigade. Navy accession recruiting costs have averaged over \$14,000 per person, officer or enlisted, which applied to the number of Sea Cadet accessions represents a significant financial benefit to the Navy. Equally important is the expectation that once a more accurate measurement methodology can be found, is, that since Sea Cadets enter the Armed Forces as disciplined, well trained and motivated individuals, their retention, graduation and first term enlistment completion rates are perhaps the highest among any other entry group. USNA officials are currently studying graduation rates for past years for ex-Sea Cadets as a group as compared to the entire Brigade. Their preliminary opinion is that these percents will be among the highest. It is further expected that this factor will be an excellent indicator of the following, not only for the USNA, but for all officer and enlisted programs the Sea Cadets may enter:

- Extremely high motivation of ex-Cadets to enter the Service.
- Excellent background provided by the U.S. Naval Sea Cadet experience in preparing and motivating Cadets to enter the Service.
- Prior U.S. Naval Sea Cadet Corps experience is an excellent pre-screening opportunity for young men and women to evaluate their interest in pursuing a military career. This factor could potentially save considerable tax-payer dollars expended on individuals who apply for, then resign after entering the Academy if they decide at some point they do not have the interest or motivation.
- U.S. Naval Sea Cadet experience prior to entering the Service is an excellent indicator of a potentially high success rate.

Data similar to the above has been requested from the United States Coast Guard Academy and the United States Merchant Marine Academy.

Whether or not they choose a service career, all Sea Cadets carry forth learned values of good citizenship, leadership and moral courage that will benefit themselves and our country.

PROGRAM FINANCES

Sea Cadets pay for all expenses, including travel to/from training, uniforms, insurance and training costs. Out-of-pocket costs can reach \$500 each year. Assistance is made available so that no young person is denied access to the program, regardless of social or economic background.

Federally funded at the \$1,000,000 level in fiscal years 2001, 2002, and 2003, \$1,500,000 in fiscal year 2004 and \$1,700,000 for fiscal year 2005 (of the \$2,000,000 requested), all of these funds were used to offset individual Cadet’s individual costs for summer training, conduct of background checks for adult volunteers and for reducing future enrollment costs for Cadets. In addition to the Federal fund received, NSCC receives under \$700,000 per year from other sources, which includes around \$226,000 in enrollment fees from Cadets and adult volunteers. For a variety of reasons, at a minimum, this current level of funding is necessary to sustain this program and the full \$2,000,000 would allow for program expansion:

- All time high in number of enrolled Sea Cadets (and growing).
- General inflation.
- Some bases denying planned access to Sea Cadets for training due to increased terrorism threat level alerts and the associated tightening of security measures—requiring Cadets to utilize alternative, and often more costly training alternatives.

- Reduced availability of afloat training opportunities due to the Navy's high level of operations related to the Iraq war.
- Reduced training site opportunities due to base closures.
- Non-availability of open bay berthing opportunities for Cadets due to their elimination as a result of enlisted habitability upgrades to individual/double berthing spaces.
- Lack of "Space Available" transportation for group movements.
- Lack of on-base transportation, as the navy no longer "owns" busses now controlled by the GSA.
- Navy outsourcing of messing facilities to civilian contractors increases the individual Cadet's meal costs.

Because of these factors, Cadet out-of-pocket costs have skyrocketed to the point where the requested \$2,000,000 alone would be barely sufficient to handle cost increases.

It is therefore considered a matter of urgency that the full amount of the requested \$2,000,000 be provided for fiscal year 2006.

Senator STEVENS. Thank you very much.

It is a very successful program and we know that costs have gone up. But we will do our best to stretch that money, General, and see to it that you have the ability to produce young men like this for us every year.

Thank you very much. We appreciate your statement of your past experience.

Senator INOUE. How many naval sea cadets are there in the United States at this moment?

Captain HURD. It is about 10,000. The mix of males, females is the same as it is in the Navy for the most part, about a three to one mix. We have units in every State except Wyoming.

Senator STEVENS. They are seeking \$300,000 more this year. It is a modest request, General. We will do our best to achieve it. Do you have anything else, Senator?

Senator INOUE. I am impressed at the number, 472 cadets have received appointments to the Naval Academy.

Captain HURD. That are currently at the Naval Academy now, yes, sir. The admissions folks love them because these young men and women for the most part know what they are getting into and our graduation rates at the Academy and through boot camp far exceed the general Navy completion rates as well. We are quite proud of that.

Mr. SILVER. And the training, the background, what you learn through the program, the experiences—when we do the hands-on training, because you are training with the actual military that do the jobs that you want to do, you do the same courses that the Navy does or the Marines, and they go through it with you. The training that you learn through this program, there is no other program that you can get that will even come close to what you learn in this program.

That is why the military allows us when we enlist to go in as advanced pay grades, through the knowledge that we learned and the reputation of what we learned in the program.

Senator INOUE. Your testimony is most reassuring at a time when our services are all experiencing problems in recruiting and retaining. Thank you very much.

Senator STEVENS. Are you in all 50 States?

Captain HURD. All except Wyoming. We have units in Guam and Iceland as well.

Senator STEVENS. Thank you very much. We appreciate your testimony.

Captain HURD. We appreciate your support.

Senator STEVENS. Our next witness is the President of the National Association of Uniformed Services, Retired Major General William Matz, formerly Deputy Commander, U.S. Army in the Pacific. Nice to see you, sir.

STATEMENT OF MAJOR GENERAL WILLIAM MATZ, JR., U.S. ARMY (RETIRED), PRESIDENT, NATIONAL ASSOCIATION FOR UNIFORMED SERVICES

General MATZ. Yes, sir, nice to see you again.

Mr. Chairman and Senator Inouye, on behalf of the over 200,000 members and supporters of the National Association for Uniformed Services (NAUS), I want to thank you for this opportunity to present our views on defense funding. We also thank you, Mr. Chairman, and the other members of your subcommittee for your leadership and your continued efforts to support and care for the men and women of the armed forces and for our military retirees and their survivors.

The primary purpose of our association is to support a strong national defense and this support includes being an advocate for the earned benefits of our Nation's warriors, both Active and retired. We understand clearly that during a time of severe budget deficits and with the country at war dollars for all Government programs are tight. But we believe that funds for the care and support of those who serve and have served must always be one of the Nation's highest priorities.

As you are aware, some Government officials have stated recently that providing the earned benefits for those who have served is hurtful. In reality, from my perspective, taking care of military personnel, their families and retirees is helpful to the Nation's cause and it will also enhance the recruiting efforts of our armed forces. Retired military and veterans can be among the very, very best recruiters if they can report that the promises were kept after their service was over.

We at NAUS join the other military and veterans services organizations in asking for the necessary funding for the proposed enhancements for those currently serving on active duty. These include, just very quickly: The Crosby-Puller Combat Wounds Compensation Act that requires that a member of the uniformed services who was wounded in a combat zone continue to be paid the monthly pay and allowances and receive the combat zone tax exclusion during his recovery period.

We also ask for your support for the Supply Our Soldiers Act, which would provide postal benefits for those serving in combat zones. Should these initiatives be enacted individually or as part of the National Defense Authorization Act, we simply ask that the funds be made available for these needed enhancements.

Now, while these issues, sir, are important, my main thrust today is to emphasize the need for full funding of the defense health program. Arriving at the point where we are now with the TRICARE program has been a long and very arduous battle and a fight that members of this subcommittee, joining with the Na-

tional Military Veterans Alliance and the Military Coalition, made happen, and for this we thank you.

As you know, the defense health program is a critical piece in ensuring the maintenance of a strong military. From my perspective, each dollar is an investment in military readiness. During my service in Vietnam as an infantryman, one of the greatest fears of soldiers arriving in that country was being wounded and not getting adequately timely medical care. Because of this, we would assure them that every wounded soldier would be recovered, every wounded soldier would be treated and evacuated as a first priority, and that they would get the very best medical care in the world.

Our military medical system is the best in the world. To stay the best, it must be fully funded. So unless we have a strong, vital military medical program here in the continental United States (CONUS) we will not be able to continue to deploy the highly trained medical units and personnel supporting our combat forces in the overseas theaters. This includes funding the network of stateside military hospitals and clinics and of course the Uniformed Services University of the Health Sciences, which I know you are both familiar with.

In my view this is at the core of medical professionalism for our Nation's uniformed services. It also includes the funding necessary to ensure adequate care for our military families and retirees.

Mr. Chairman, your longstanding leadership and your support for military medicine has been clearly stated over the years. In fact, from my view it has been critical to its success, indeed to its very survival. I am reminded of a like sentiment expressed just recently by the chairman of the Senate Armed Services Committee, who was opposing a proposal to shift money from military health care to buy weapons rather than seeking the funds for both. We absolutely agree on this point and also that funding for both must be a national priority. Accordingly, sir, we ask that you continue to support full funding for our very vital defense health program.

Again, thank you for your support and thank you for these few minutes to come before you today.

Senator STEVENS. Senator.

Senator INOUE. Well, as you have indicated, the best recruiting weapon that we have is a veteran who has served and can tell the new American that the military is the best place to serve.

General MATZ. Absolutely, sir, yes.

Senator INOUE. He is the evidence, the proof.

General MATZ. Yes, that is the evidence, absolutely.

Senator INOUE. We will do our best, sir.

Senator STEVENS. I was amazed to find when we were in Iraq and Afghanistan the number of young people we talked to that talked to us about their fathers and their experience. There is no replacing that generation to generation conveyance of the duty to serve.

General MATZ. Absolutely, sir.

Senator STEVENS. Thank you very much, General.

General MATZ. Thank you very much.

[The statement follows:]

PREPARED STATEMENT OF WILLIAM M. MATZ, JR.

Introduction

Mister Chairman and distinguished members of the committee, I became the President of the National Association for Uniformed Services (NAUS) on January 15 of this year. As the representative of our 190,000 members/supporters, I extend our gratitude for the invitation to testify before you about our views and suggestions concerning the following defense funding issues:

First, I would like to explain to you our association and why we feel so very qualified to discuss our members' legislative concerns. The National Association for Uniformed Services (NAUS) prides itself in that it is the "The Servicemember's Voice in Government—Focusing on People." NAUS is unique. Founded in 1968, it's the only military affiliated association whose membership represents the entire military/veteran family. No other association provides such a broad representation when dealing with Congress, the White House, and the Pentagon. NAUS represents all seven branches of the uniformed services: Army, Navy, Marine Corps, Air Force, Coast Guard, United States Public Health Service (USPHS), and National Oceanic and Atmospheric Administration (NOAA), including all components: Active Duty, Retired, Reserve, National Guard, and other veterans, their spouses, widows/widowers, other family members and survivors; and all grades and ranks—enlisted/officer.

The primary purpose of our association is to support a strong national defense and to promote and protect the interests and promised benefits earned by members of the uniformed services for themselves, their families and survivors and those of all American citizens with common interests.

Accordingly, we support issues that directly affect those currently serving on Active duty—Regular, National Guard and Reserve. Our testimony will ask this committee's funding for the following pieces of legislation upon passage:

Crosby-Puller Combat Wounds Compensation Act

We support this Act which would ensure that a member of the uniformed services who is wounded or otherwise injured while serving in a combat zone continues to be paid monthly military pay and allowances, while recovering from the wound or injury at the same level received while in the combat zone. This act will also ensure that the servicemember continues to receive the combat zone tax exclusion during recovery.

Position.—We urge that S. 461, the Crosby-Puller Combat Wounds Compensation Act be funded in the Defense appropriation.

Montgomery GI Bill (MGIB) & Educational Benefits

The strain on the Reserve Component (Reserve and National Guard units) caused by frequent and long call-ups to Active Duty has had a negative affect on recruiting and retention efforts. Added enticements are needed to help bolster these forces, which our National defense has come to rely so heavily on in contingency operations.

We believe that extending the same MGIB and educational benefits to the Reserve and Guard forces would help in their recruiting/retention programs.

Position.—We urge the Defense subcommittee to provide the funding of enhanced MGIB and Educational Benefits for the Reserve and National Guard units.

Guard and Reserve Enhanced Benefits Act

Since the National Guard and Reserve make up a great portion of the troops in the areas of current operations, we believe other measures are needed to alleviate many of the hardships caused by these frequent and prolonged deployments. Many are contained in the Guard and Reserve Enhanced Benefits Act, such as Child Care, Non-reduction in pay for Federal Employees, Tax Credit for Employers, Reduced minimum age for eligibility for non-regular Service retired pay, and Expanded eligibility of Ready Reserve Members under the Tricare Program.

Position.—We urge the Defense subcommittee to provide funding for S. 38, the Guard and Reserve Enhanced Benefits Act.

Supply Our Soldiers Act of 2005

NAUS supports the "Supply Our Soldiers Act of 2005," H.R. 887, a bill to provide for a program under which postal benefits shall be made available for purposes of certain personal correspondence and other mail matter sent from within the United States to members of the Armed Forces serving on active duty abroad who are engaged in military operations, and for other purposes.

Position.—We urge the Senate to sponsor a companion bill and the Defense subcommittee to provide the funding to assist families of active duty and activated Re-

serve and National Guard servicemembers with postal costs for packages and mail to troops in current operations.

We contend that honoring the promises made to those veterans who made a career of the military will help the military services in their recruiting and retention efforts. Accordingly, we strongly urge the Defense subcommittee's support of the following:

Combat Related Special Compensation (CRSC) for Chapter 61 Retirees

Many combat injured military veterans were forced by the severity of their injuries to be medically retired under Chapter 61 regulations. Quite a few of them would have completed 20 years of service towards a full military retirement, but could not. These individuals are not qualified for Combat Related Special Compensation because they served less than 20 years. They deserve the same consideration for the award of CRSC as a 20-year retiree and their level of award should be based on their years of active service.

Position.—The House has introduced legislation to resolve this issue (H.R. 1366). NAUS urges the Senate to introduce companion legislation, and urges the Defense subcommittee to provide the funding to resolve this issue.

Survivor Benefits Program/Dependency and Indemnity Compensation Offset

Currently, if the retired military sponsor, who enrolled in the Survivor Benefits Program (SBP), dies of a service-connected disability, the surviving spouse is eligible for both the SBP annuity and Dependency and Indemnity Compensation (DIC) from the Department of Veterans Affairs. However, the SBP annuity is offset by the full amount of the DIC annuity. Each program's purpose is different, SBP's goal is to provide for the loss of the sponsor's earned retired pay, and DIC's goal is to provide the surviving spouse compensation for the loss of their spouse due to injuries caused by his/her service to the country.

Position.—The National Association for Uniformed Services strongly urges funding for S. 185 which would end the SBP offset with DIC.

30 Year Paid-Up Status

A secondary goal is the acceleration of the paid-up SBP provisions by changing the effective date from October 1, 2008, to October 1, 2005, already 2 years beyond the 30th anniversary of the program. Enrollees who have reached the age of 70 and have paid their SBP premiums for more than 30 years (360 payments) are already being penalized.

Position.—We ask that the Defense subcommittee provide funding to allow those early enrollees to be paid up as described in S. 185.

Permanent ID Card for Dependents Age 65 and Over

One of the issues stressed by NAUS is the need for permanent ID cards for dependents age 65 and over. Last year's NDAA authorized the issuance of permanent ID card for dependents age 75 and over. We still believe the age should be 65 and over. With the start of TRICARE for Life, expiration of TFL-eligible spouses' and survivors' military identification cards, and the threatened denial of health care claims, causes some of our older members and their caregivers' significant administrative and financial distress.

Position.—NAUS urges that the Defense subcommittee continue the progress made last year by directing the Secretary of Defense to authorize issuance of permanent military identification cards to uniformed services family members and survivors who are age 65 and older, with appropriate guidelines for notification and surrender of the ID card in those cases where eligibility is ended by divorce or remarriage.

Finally, NAUS urges the Defense subcommittee's consideration of the following issues related to the benefit of military service:

Military Exchanges and Commissaries

Issue One.—NAUS believes that DOD wants to reduce/eliminate the subsidy for the commissary system that provides food and other essentials to troops and families around the world, which will result in the military community losing the benefit.

Position.—The National Association for Uniformed Services strongly urges the committee to continue to provide the funding for the commissary subsidy to sustain the current services. Commissaries are a key component of the military pay and compensation package. Any action that would reduce/eliminate this benefit would result in a diminished quality of life and more out of pocket costs.

Issue Two.—Recent DOD initiatives towards exchange consolidation and more recently shared services are an issue of interest for our members. The Unified Ex-

change Task Force has been developing several shared services models designed to reduce overhead costs in the areas of logistics, finance and accounting, information technology, human resources and non-resale procurement. This approach is based on reducing “backroom” costs for the exchanges so that they will have greater margins from which to offer their customers better pricing. However, NAUS continues to view the proposals with cautious interest until additional information becomes available. For example, implementation costs and transition costs are important components in the shared services decision and that information is not yet available.

While the Unified Exchange Task Force (UETF) has been extremely open and informative throughout this process (associations have met quarterly with the UETF leadership since its inception), NAUS will reserve its support of shared services until a substantive, business-based analysis is completed that clearly demonstrates the change will enhance the benefit to the patron and increase the MWR dividend.

Position.—NAUS asks the Defense subcommittee to provide the funding necessary to ensure that the exchanges, whether or not they share services, continue to provide appropriate product choices, competitive prices, and increased funding for MWR programs.

Current and Future Issues Facing Uniformed Services Health Care

The National Association for Uniformed Services would like to thank the subcommittee and the full Appropriations Committee for its leadership in the past for providing the landmark legislation extending the Pharmacy benefit and TRICARE system to Medicare eligible military retirees, their families and survivors, making the lifetime benefit permanent, establishing the DOD Medicare Eligible Retiree Health Care Fund, reducing the catastrophic cap and making other TRICARE improvements. However, we must again urge that the Senate provide full funding of the Defense Health Program.

Position.—DOD has projected an \$11 billion shortfall in funding between fiscal year 2006–2011. NAUS strongly urges the Defense subcommittee to ensure that full funding is provided for this most crucial of programs.

Federal Employees Health Benefits Program (FEHBP)

The National Association for Uniformed Services has been a long time proponent of legislation that would provide military personnel the option of participating in the Federal Employees Health Benefit Program. Though confident that the TRICARE program and the TRICARE for Life program will be successful, because they are an outstanding value for most beneficiaries, in a few cases, the TRICARE/TRICARE for Life options may not be the best choice, or may not be available for the eligible beneficiary. For that reason, we believe the FEHBP option should be enacted. Providing the FEHBP, as an option would help stabilize the TRICARE program, provide a market based benchmark for cost comparison and be available to those for whom TRICARE/TRICARE for Life is not an adequate solution.

Position.—NAUS strongly urges the Defense subcommittee to provide additional funding to support a full FEHBP program for military personnel as an option.

Include Physician and Nurse Specialty Pay in Retirement Computations

Results of a recent Active Duty Survey show that pay and benefits are the most important factors impacting retention. Improving specialty pay/bonuses and including specialty pay/bonuses in retired pay calculations would aid retention. Therefore, prompt action to retain these and other highly skilled medical professionals is needed.

Position.—The National Association for Uniformed Services requests funding to allow the military physicians and nurses to use their specialty pay in their retirement computations. The military services continue to lose top quality medical professionals (doctors and nurses) at mid-career. A major reason is the difference between compensation levels for military physicians and nurses and those in the private sector.

Conclusion

Mr. Chairman and distinguished members of the Defense subcommittee, we want to thank you for your leadership and for holding these hearings this year. You have made it clear that the military continues to be a high priority and you have our continuing support.

Senator STEVENS. Our last witness is Retired Master Chief Joseph Barnes, the U.S. Naval Executive Secretary of the Fleet Reserve Association. Yes, sir.

STATEMENT OF MASTER CHIEF JOSEPH L. BARNES, U.S. NAVY (RETIRED), NATIONAL EXECUTIVE SECRETARY, FLEET RESERVE ASSOCIATION

Chief BARNES. Thank you, Mr. Chairman, Senator Inouye. The Fleet Reserve Association (FRA) appreciates the opportunity to present its views on the 2006 defense budget.

Before I address several priority issues, I wanted to thank this distinguished subcommittee for its leadership, support, and strong commitment to important quality of life programs benefiting service members, reservists, military retirees, and their families.

FRA's number one priority is supporting adequate funding for protected devices and equipment and military personnel serving in Operations Iraqi Freedom and Enduring Freedom. This includes body armor, outer protective vests, and armor for combat vehicles. The next priority is ensuring that wounded troops, their families and survivors of those killed in action are those cared for by a grateful nation. FRA fully endorses continuing combat pay and other special pays until the completion of hospital care or discharge from their respective service and permanent increases to the death gratuity and service members group life insurance.

Another top concern of FRA is to work with Congress and DOD to ensure continued full funding of the defense health budget and ensure access to health care for all uniformed services beneficiaries. The new TRICARE Reserve Select health plan is important to our Guard and Reserve personnel and their families and a fully funded health care benefit is critical to readiness and the retention of qualified uniformed services personnel.

FRA supports appropriations necessary to implement the 3.1 percent across the board military pay increase on January 1, 2006. The association also strongly supports continued progress toward closing the military pay gap. Unfortunately, targeted pay increases for senior enlisted personnel and certain officer grades were not included in the administration's budget. At a minimum, FRA supports funding pay increases at least comparable to the annual employment cost index.

Adequate service end strengths are important to maintaining readiness. If force size is inadequate and operational tempo (OPTEMPO) too intense, the performance of individual service members is negatively affected. FRA believes there are inadequate numbers of uniformed personnel to sustain the war effort and other operational commitments. This situation also creates considerable stress on the families of service personnel.

FRA appreciates the major reform of the military survivor benefit plan authorized in this year's defense authorization act and soon thousands of survivors will no longer have to endure a reduction in their survivor benefits plan (SBP) annuities upon reaching age 62.

Another SBP reform issue is also important to FRA's membership, that being the acceleration of SBP paid-up date from 2008 to 2005 for participants having paid premiums for 30 years and being at least 70 years of age. If authorized, the association asks for support from this distinguished subcommittee.

FRA supports funding to maintain the commissary benefit at the current level, increased reserve Montgomery GI bill (MGIB) edu-

cation benefits, which are currently funded well below the authorized level, funding for family awareness and spouse employment opportunities, which are integral to our well-being retention—their well-being and retention, excuse me—and supplemental impact aid funding for school districts with large numbers of military-sponsored students.

If authorized, FRA also strongly supports full concurrent receipt of military retired pay and VA disability compensation, retention of the full final month's retired pay by retirees' surviving spouse, and the extension of the dislocation allowance to retiring service members.

Thank you again, Mr. Chairman, for the opportunity to present the association's recommendations and I stand ready to answer any questions you may have.

[The statement follows:]

PREPARED STATEMENT OF JOSEPH L. BARNES

INTRODUCTION

Mr. Chairman and other distinguished members of the subcommittee, the Fleet Reserve Association (FRA) is most grateful for your support of our military men and women and, particularly, those serving or having served in Afghanistan, Iraq and other troubled spots around the globe. At the top of the Association's gratitude list is the quality of life improvements funded in the 108th Congress. Thanks so much for the effort. FRA knows you have contributed in the previous year to making a tough life much easier for those that might make the ultimate sacrifice in the service of this Nation. BRAVO ZULU.

This Statement lists the concerns of our members, keeping in mind that the Association's primary goal will be to endorse any positive safety programs, rewards, and quality of life improvements that support members of the uniformed services, particularly those serving in hostile areas, and their families.

FRA is concerned that in spite of signs of bravado, many of our Sailors, Marines and Coast Guardsmen serving in Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) may not be fully armed with the protective devices available for their personal safety. Advocating the funding for and receipt of these protective devices; i.e.—interceptor body armor, outer protective vests, and small arms protective inserts; to every uniformed member sent into harm's way is FRA's No. 1 priority.

The Association's next priority is to see that our wounded troops, their families, and the surviving families of the men and women killed in action are cared for by a grateful Nation. In this respect, FRA fully endorses funding any proposal that authorizes our wounded veterans continuance of their combat pay and other special pays received while in combat until the completion of their hospital care or discharge from their respective military service. And any authorized increases to the death gratuity and life insurance proposed by the Congress.

OTHER GOALS

Health Care.—FRA and its membership are most grateful for the improvements in accessing proper health care for the military community and the expansion of the program to provide greater care for military retirees and their families. Not everyone in the military community is pleased, but Congress has done much with the resources available to offer the best program for as many beneficiaries as possible. There are other proposals on the table that would increase benefits for those not satisfied with the current program. FRA endorses these proposals for many of its members would be affected by their adoption. However, the Association's primary concern is that existing programs be adequately funded for fiscal year 2006 and beyond.

Active Duty/Reserve Programs.—Topping the list among the active duty and reserve members of the Sea Services (Navy and Marines) are adequate pay and allowances, child care and housing.

Pay and Allowances.—For the fiscal year 2006, the administration has recommended a 3.1 percent across the board basic pay increase for members of the Armed Forces. This is commensurate with the 1999 formula to provide increases of

0.5 percentage points greater than that of the previous year for the private sector. With the addition of targeted raises, the formula has reduced the pay gap with the private sector from 13.5 percent to 5.2 percent following the January 1, 2005, pay increase.

FRA, however, is disappointed that there is no targeted pay increase recommended, particularly for mid-grade and more senior enlisted personnel. FRA, The Military Coalition, the 9th Quadrennial Review of Military Compensation (9thQRMC), and the Department of Defense have advocated the necessity for targeted pays. In spite of the number of special pay increases in the last few years, the pay of our noncommissioned and petty officers remains compressed; a situation that has existed since the advent of the all-volunteer force.

FRA urges the subcommittee to appropriate the necessary funds for the 3.1 percent pay increase for fiscal year 2006.

Other Pays and Allowances.—FRA supports funding to continue and enhance enlistment and reenlistment bonuses and other compensatory items necessary for the military services to function accordingly and to provide the necessary incentives for the Nation's young men and women to serve in the Armed Forces. Recruiting and retention are vital to the success of the All-Volunteer Force and fulfilling the Nation's commitments and should be funded adequately to meet the services needs.

Basic Allowance for Housing (BAH).—FRA is seeking revised housing standards. Many enlisted personnel, for example, are unaware of the standards for their respective pay grade and assume that the applicable BAH level is determined by a higher standard than they may be authorized. This causes confusion over the mismatch between the amount of BAH they receive and the actual cost of their type of housing. As an example, enlisted members are not authorized to receive BAH for a 3-bedroom single-family detached house until achieving the rank of E-9—which represents only 1 percent of the enlisted force—yet many personnel in more junior pay grades do in fact reside in detached homes. The Coalition believes that as a minimum, this BAH standard (single family detached house) should be extended gradually to qualifying service members beginning in grade E-8 and subsequently to grade E-7 and below over several years as resources allow.

Through your leadership and support, the plan to reduce median out-of-pocket expenses has been implemented. The aggressive action to better realign BAH rates with actual housing costs has had a real impact and provides immediate relief for many service members and families struggling to meet rising housing and utility costs. Unfortunately, housing and utility costs continue to rise and the pay comparability gap, while diminished over recent years, continues to exist. Members residing off base face higher housing expenses along with significant transportation costs, and relief is especially important to junior enlisted personnel living in the civilian environment who do not qualify for other supplemental assistance.

FRA urges the subcommittee to appropriate the necessary funds to cover authorized increases in housing allowances for uniformed personnel.

Permanent Change of Station (PCS) Reimbursements.—FRA is most appreciative of the significant increases in the Temporary Lodging Expense (TLE) allowance authorized for fiscal year 2002 and the authority to raise PCS per diem expenses to match those for Federal civilian employees in fiscal year 2003. FRA greatly appreciates the provision in the fiscal year 2004 defense bill to provide full replacement value for household goods lost or damaged by private carriers during government directed moves, and looks forward to the timely implementation of the Department of Defense comprehensive "Families First" plan to improve claims procedures for service members and their families.

These were significant steps to upgrade allowances that had been unchanged over many years. Even with these changes, however, service members continue to incur significant out-of-pocket costs in complying with government-directed relocation orders.

For example, PCS mileage rates have not been adjusted since 1985. The current rates range from 15 to 20 cents per mile—less than half the 2005 temporary duty mileage rate of 40.5 cents per mile for military members and Federal civilians. PCS household goods weight allowances were increased for grades E-1 through E-4, effective January 2003, but weight allowance increases are also needed for service members in grade E-5 and above to more accurately reflect the normal accumulation of household goods over the course of a career. The Association has recommended modifying weight allowance tables for personnel in pay grades E-7, E-8 and E-9 to coincide with allowances for officers in grades O-4, O-5, and O-6, respectively. FRA also supports authorization of a 500-pound professional goods weight allowance for military spouses.

In addition, the overwhelming majority of service families own two privately owned vehicles, driven by the financial need for the spouse to work, or the distance

some families must live from an installation and its support services. Authority is needed to ship a second POV at government expense to overseas' accompanied assignments. In many overseas locations, families have difficulty managing without a second family vehicle because family housing is often not co-located with installation support services.

FRA is sensitive to the subcommittee's efforts to reduce the frequency of PCS moves. But the Armed Services cannot avoid requiring members to make regular relocations, with all the attendant disruptions in their children's education and their spouse's career progression. The Association believes strongly that the Nation that requires them to incur these disruptions should not be requiring them to bear the resulting high expenses out of their own pockets.

FRA urges additional funding to support further upgrades of permanent change-of-station reimbursement allowances to recognize that the government, not the service member, should be responsible for paying the cost of government-directed relocations.

Combat and Incentive Pays during Hospitalization.—FRA strongly urges the subcommittee to take action to ensure combat-wounded service members do not have their pay reduced or their taxes increased during periods of hospitalization. The Association believes that such compensation treatment is essential for service members who continue to suffer from the hazardous conditions that combat-related incentive pays and tax relief were created to recognize.

Basic Allowance for Subsistence (BAS).—FRA is grateful for the increases in BAS over the years. There is more to be done; however, to permit single career-enlisted members greater individual responsibility in their personal living arrangements. FRA believes it is inconsistent to demand significant supervisory, leadership and management responsibilities of noncommissioned and petty officers, but still dictate to them where and when they must eat their meals while at their home duty station.

FRA has urged the authorizers to repeal the statutory provision limiting BAS eligibility to 12 percent of single members residing in government quarters. As a long-term goal, extend full BAS eligibility to all single career enlisted members, beginning with the grade of E-6 and, eventually, to the lower grades as budgetary constraints are eased. FRA requests the subcommittee's support for the repeal by appropriating the necessary funding to implement any increases in BAS adopted by the authorization process.

MGIB. The Montgomery GI Bill often is characterized as a form of compensation or as a "recruiting tool." However, FRA would argue that it would be more appropriate to consider the benefit an investment in our nation's future. Military personnel can use the MGIB on active duty to aid in their professional development, giving them the tools to become better leaders, mentors and representatives of their respective service. Our Nation has a responsibility to ensure the MGIB investment remains a relevant supplement to completing one's education. We must give our veterans the tools to excel in an academic environment.

There are 61,000 senior enlisted members in the Armed Forces who entered military service during the Veterans Education Assistance program (VEAP) era and did not have the opportunity to enroll in the MGIB. FRA has urged the adoption of an open enrollment period offering these enlisted leaders a chance to sign up for the education benefits available through the MGIB. In fact, the Association believes the MGIB should be expanded so that any uniformed member reenlisting in his or her military service will have the opportunity to enroll in the program.

FRA recommends funding enhancements of benefits in the MGIB as authorized. The Association is grateful for the October 1, 2004 increases in basic rates but they cover only about 60 percent of current tuition expenses. A creation of a benchmark for the MGIB will keep pace with the cost of an average 4-year college education. For the school year 2004–2005 (\$20,082 for 4 yrs. at private institutions; \$5,132 at public institutions) the cost is much greater than what is available through the MGIB. Enhancing the value of the MGIB would be an improved incentive to enlist or reenlist in the Armed Forces.

FAMILY READINESS AND SUPPORT

It's most important that DOD and the military services concentrate on providing programs for the families of our service members. There are a number of existing spousal and family programs that have been fine tuned and are successfully contributing to the well-being of this community. The Navy's Fleet and Family Centers and the Marines' Marine Corps Community Services (MCCS) and Family Services programs are providing comprehensive, 24/7 information and referral services to the service member and family through its One Source links. One Source is particularly

beneficial to mobilized reservists and families who are unfamiliar with varied benefits and services available to them.

It's true that "the service member enlists in the military service—but it's the family that reenlists." To ensure the family opts for a uniformed career, the family must be satisfied with life in the military. To assist in bringing that satisfaction, FRA recommends the following to the subcommittee.

Child and Youth Programs.—Both programs rank high in priority for the families of Sailors and Marines. As an integral support system for mission readiness and deployments, its imperative these programs continue to be improved and expanded to cover the needs of both married and single parents. Currently, the Navy's program cares for over 31,000 children 6 months to 12 years in 227 facilities and 3,180 on and off base licensed child development homes. With the high priority tagged to child care, FRA urges Congress to continue enhancing and increase funding for this important benefit.

Pre-tax Treatment for Child Care Expenses.—FRA seeks the support of the subcommittee to direct the Department of Defense to implement flexible spending accounts for pre-tax payment of child-care expenses. The Association urges the subcommittee to coordinate with the Ways and Means Committee to enact such authority as may be needed as soon as possible.

Spousal Employment.—Today's all-volunteer environment requires the services to consider the whole family. It is no longer adequate to focus only on the morale and financial well-being of the member. Now, his or her family must be considered. One of the major considerations for spousal employment is it could be a stepping-stone to retention of the service member—a key participant in the defense of this Nation. The Association urges Congress to continue its support of the military's effort to affect a viable spousal employment program and to authorize sufficient funds to assure the program's success.

Impact Aid.—FRA is most appreciative for the Impact Aid authorized in previous Defense measures but must urge this subcommittee and its full committee to support a substantial increase in the funding for schools bearing the responsibility of educating the children of military personnel and Federal employees. Current funds are not adequate to ably support the education of federally sponsored children attending civilian community elementary schools. Beginning with the Nixon Administration, funding for Impact Aid has decreased dramatically. For example, in the current fiscal year the Military Impacted Schools Association (MISA) estimates Impact Aid is funded at only 60 percent of need according to law. Our children should not be denied the best in educational opportunities. Impact Aid provides the children of our Sailors, Marines, Coast Guardsmen, Soldiers, and Airmen, a quality education. FRA implores Congress to accept the responsibility of fully funding the military Impact Aid program. It is important to ensure our service members, many serving in harm's way, have little to concern with their children's future but more to do with the job at hand.

DOD Schools.—FRA notes with concern the Department of Defense's (DOD's) repeated quest to close some or all DOD-sponsored schools operating on military installations in CONUS. FRA is adamantly opposed to reducing the quality of education now enjoyed by the children of military personnel and Federal employees' by forcing them to enroll in public schools. As long as the United States continues with an all-volunteer force and as long as U.S. uniformed personnel and employees of the Armed Forces are deployed to foreign shores, CONUS schools provide a safe haven for their children. FRA recommends that Congress provide the necessary funds to continue the effective operation of the Department of Defense's school system and to cease and desist from using appropriated funds to find ways and means to close or transfer its school system to local school districts. There is no need for further threats of closures that damage the morale of our Nation's military personnel and families. In an all-voluntary force environment, it's certain Congress doesn't want to add to the retention challenges the military may face in the future.

Morale, Welfare, and Recreation Programs (MWR).—FRA can't help but believe Congress and even the military services are less concerned with MWR programs that are really vital to supporting the service member and his or her family. The Navy's top enlisted chief, MCPON Terry Scott USN, again this year advised a House panel on February 16 last he is particularly troubled that current budget decisions will place a greater burden on the Service in providing the necessary programs so important in maintaining the well-being of its sailors and families. The MWR programs of the Navy; Child Care, Fleet/Family Support Program (FFSP), for example, include recreation, fitness, social and community support activities, spouse employment, personal financial management, counseling, family advocacy, safety, transition and relocation—all having a positive affect on Fleet Readiness.

Currently, the shortage of funds is curtailing or closing some of the activities while the costs of participating in others have increased over the past year or two. One major problem is in Europe. The weakening dollar has caused an increase in child-care rates, movie tickets, etc., and placed a hiring freeze on MWR employees.

The lack of fiscal support for MWR programs is damaging the need to provide mental and physical relief to both sailors and families from the stress of deployments that have increased dramatically since the military downsized in the 1990's. MWR programs build a community spirit among those living on or near a military installation, something not experienced by those who may seek comfort and well-being from a civilian environment.

MWR facilities should be fully funded and include where and when available the guard, reserve, and retired military population residing in the area. One group aids the other. Who better to assist, comfort, counsel, and encourage military family members concerned with the conflict in Iraq, continuing deployments, and other military related activities.

FORCE SIZE/READINESS/OPTEMPO/PERSTEMPO

FRA will again simultaneously address force size, readiness, OPTEMPO, and PERSTEMPO as one issue. Readiness is achieved at its highest if force size is adequate in numbers, OPTEMPO is not too excessive, and PERSTEMPO is not adversely affecting the performance of individual service members. FRA noted in its fiscal year 2005 statement that all four were suffering from a shortage of uniformed members. Since then Congress has added numbers to the uniformed manpower in both the Army and Marine Corps. FRA is grateful for the increase and is hopeful the added manpower will be the answer to the difficulty experienced by the military in Iraq over the past few years. The Association, however, is concerned that the Navy is going to the extreme in downsizing its uniformed manpower. This concern has been voiced to the authorizing committee in hope some action will be directed to steady the outgoing tide of experienced naval personnel.

Meanwhile, FRA urges the subcommittee to continue funding our military personnel to ensure the numbers remain sufficient to relieve both OPTEMPO and PERSTEMPO, primarily the result of operations in Afghanistan and Iraq.

RESERVE COMPONENT

Operational Tempo.—The increase in the use of reserve units to serve along side active duty components in Iraq, as an example, has caused considerable challenges for individual reservists. Not only has their mobilization placed a strain on employment and income, but the family as well. Employer support, once strong, decreases as more essential employees are whisked-off to spend longer periods in uniform leaving the employer frustrated with having to find a replacement and, at the same time, hold the position open for the reservist's return.

FRA has always supported the Total Force Policy but is concerned that the sustained use of reserve forces will eventually harm the recruiting and retention of young men and women willing to serve as future citizen Sailors, Marines, and Coast Guardsmen. The United States must maintain a strong reserve force at all times in the event of a greater need than at the present.

The fiscal year 2005 defense authorization bill established a Commission on the National Guard and Reserves. FRA is in hope that it will provide recommendations on what enhancements are necessary to recruit and retain the number of reservists required for the defense of the United States. There is a possibility the study may include recommendations addressing such issues as tax relief, healthcare, retirement upgrades, improvements in the MGIB-SR, and family support programs.

Until the study is released, FRA urges this subcommittee to appropriate funds to support reserve and guard programs authorized in the fiscal year 2006 National Defense Authorization Act that:

- Increase in both enlisted and reenlistment bonuses.
- Enhance the MGIB-SR rates for those who choose to participate in the program.
- Provide academic and financial protection to members who are attending an institution of higher learning when called to active duty.
- Support and fund programs for families, particularly those geographically dispersed and not readily accessible to military installations and inexperienced with the military.
- Authorize cost-share access to Tricare for members of the Selected Reserve and their families.

RETIRED COMPONENT

Concurrent Receipt.—The fiscal year 2003 National Defense Authorization Act (NDAA) authorizes a special compensation that establishes a beachhead to authorizing full concurrent receipt, a term for the payment of both military non-disability retired pay and any VA compensation for service-connected disabilities without a reduction in one or the other payment. The fiscal year 2004 and 2005 NDAA expanded the benefit list through Combat Related Disability Pay (CRDP) and Combat Related Special Compensation (CRSC). Although FRA is appreciative of the effort of Congress to address the issue, it fails to meet the resolution adopted by the Association's membership to seek full compensation for both length-in-service military retirement and VA compensation. Currently, the receipt of VA compensation causes a like reduction to a retired service member's military retired pay. This leads to the belief, and well-deserved, that retired service members, earning retired pay as a result of 20 years or more of service, are forced to pay for their own disablement.

Most disabilities are recognized after the service member retires. Some are discovered while the member is still performing active duty or as the result of a retirement physical. However, it is to the benefit of the Department of Defense to retire the member without compensation for any disability. Instead, the member is directed to the Department of Veterans' Affairs for compensatory relief for the damages incurred by the member while serving the Nation in uniform.

FRA has encouraged Congress to take the helm and authorize and fund concurrent receipt for all qualified military non-disabled retirees who are eligible for and receiving veterans' compensation.

CONCLUSION

FRA is grateful to the subcommittee for the opportunity to present its goals for fiscal year 2006. Further information may be obtained by contacting Mr. Matthew Schafer, FRA Acting Director for Legislative Programs.

Senator STEVENS. Thank you very much and thank you for your patience in staying with us, the last witness of the day.

Chief BARNES. Not a problem, sir.

Senator STEVENS. Questions, Senator?

Senator INOUE. I just wanted to say that the FRA has a very, very active organization in Hawaii.

Chief BARNES. Thank you, Senator, and congratulations on your recognition last year as our Pinnacle Award recipient—

Senator INOUE. Thank you, sir.

Chief BARNES. Following the distinguished chairman's receipt a couple years ago.

Senator STEVENS. That is right.

Thank you again for your testimony.

ADDITIONAL SUBMITTED STATEMENTS

If there are any additional statements that individuals would like to submit for the record, it will be held open for 5 days.

[The statements follow:]

PREPARED STATEMENT OF SUE SCHWARTZ, DBA, RN, CO-CHAIRMAN, HEALTH CARE COMMITTEE, MILITARY OFFICERS ASSOCIATION OF AMERICA, ON BEHALF OF THE MILITARY COALITION (TMC)

OVERVIEW

Mr. Chairman, The Military Coalition (TMC) thanks you and the entire subcommittee for your continued, unwavering support for funding the needs of active duty, Guard, Reserve and retired members of the uniformed services, and their families and survivors. The subcommittee's work to greatly improve military pay, eliminate out of pocket housing expenses, improve health care, and enhance other personnel programs has made a significant difference in the lives of active, Guard and Reserve personnel and their families. This is especially true for our deployed servicemembers and their families and survivors who are engaged throughout this world in the global war on terror.

Despite these improvements in military compensation, we are deeply troubled by how much harder troops have to work—and how much more their families have to sacrifice—for that compensation.

Today's reality is simple—servicemembers and their families are being asked to endure ever-greater workloads and ever-greater sacrifices. Repeated deployments, often near back-to-back, have stressed the force to the point where recruiting and retention are real concerns for some Services; and, if it weren't for the Services' stop-loss policies and massive recalls of Guard and Reserve members, readiness would suffer. The hard fact is that we don't have large enough forces to carry out today's missions and still be prepared for any new contingencies that may arise elsewhere in the world. In addition, the Coalition is concerned that the Navy and Air Force are in the midst of "transformation" initiatives that include reducing their respective end strengths despite continuing demanding operational commitments.

In testimony today, The Military Coalition offers its collective recommendations on what needs to be done to address these important issues and sustain long-term personnel readiness.

BUDGET OVERVIEW

The Military Coalition is concerned that some in the Executive Branch are now bemoaning Congress' efforts in recent years to reverse military pay shortfalls and correct compensation and benefit inequities affecting retired military members, military survivors and Guard and Reserve members, contending that the cost of those initiatives impinges on current defense budget needs, including the ability to support compensation initiatives for the current force.

The Coalition objects strongly to any such efforts to pit one segment of the military community against another. Our experience has been that this subcommittee has rarely turned down Defense Department requests for current force funding needs. If anything, Congress has had greater sensitivity than the Executive Branch—regardless of the political party of the administration—to the importance of career military benefits to long-term retention and readiness.

Those who complain today about the cost of restoring military pay comparability, repealing REDUX retirement penalties, and enacting TRICARE For Life apparently do not recall that the Joint Chiefs of Staff at the time all told Congress that fixes were needed in these areas in order to address the significant retention problems experienced in the late 1990's.

Congress has been wise enough to see what Executive Branch officials of both parties have not in recent years—that it is not enough to just meet the short term desires of the 19 year old new enlistee with more cash in hand. Those members get older and have families, and their families grow much more concerned at the second and third reenlistment points, often after multiple family separations, whether the long-term benefits of a military career offset the extraordinary and persistent demands and sacrifices inherent in serving 20 to 30 years in uniform.

The Military Coalition believes this subcommittee will see past penny-wise and pound-foolish efforts to rob one element of the military community to pay another, and will continue to recognize the hard-learned lessons of the past—that successfully sustaining readiness and retention over the long term requires fair treatment for military members and families at every stage: active duty, Guard and Reserve, retired, and survivors.

ACTIVE FORCE ISSUES

Since the end of the Cold War, the size of the force and real defense spending has been cut by more than a third. In fact, the defense budget today is 3.8 percent of this Nation's Gross Domestic Product—less than half of the share it comprised in 1986. But today America's armed forces are engaged in a global war on terror—a campaign that has made constant and repeated deployments a way of life for today's servicemembers. There is no question that the stress of today's sustained operations is taking a significant toll on our men and women in uniform, and their families and survivors, and this is being reflected in failure of the Army Guard and Reserve to meet its recent recruiting goals. In addition, there are indications of growing challenges in recruiting members of the other Services.

Congress has taken action to help relieve the stress of repeated deployments by increasing Army and Marine Corps end strength and by making family separation and danger area pays permanent. These are notable and commendable improvements; however, sustaining a quality force for the long-term remains a significant challenge, especially in technical specialties. While some Services are meeting retention goals, these goals may be skewed by post-9/11 patriotism and by Services' intermittent stop-loss policies. This artificial retention bubble is not sustainable for the

long-term under the current pace of operations, despite the reluctance of some to see anything other than rosy scenarios.

From the servicemembers' standpoint, the increased personnel tempo necessary to meet continued and sustained training and operational requirements has meant having to work progressively longer and harder every year. "Time away from home" is now a real focal point in the retention equation. Servicemembers are enduring longer duty days; increased family separations; difficulties in accessing affordable, quality health care; deteriorating military housing; less opportunity to use education benefits; and significant out-of-pocket expenses with each permanent change of station move.

Intensified and sustained operations in Iraq and Afghanistan are being met by servicemembers' patriotic dedication, but there is little question that once Service stop-loss policies are lifted, the retention of combat-experienced servicemembers is going to be problematic.

Experienced (and predominantly married) officers, NCOs and petty officers are under pressure to make long-term career decisions against a backdrop of a demand for their skills and services in the private sector. Many servicemembers and their families debate among themselves whether the rewards of a service career are sufficient to offset the attendant demands and sacrifices inherent in uniformed service. Faced with repeated deployments to a combat zone, the appeal of a more stable career and family life, often including an enhanced compensation package and less demanding working conditions, is attractive. When allowed the option, many of our excellent soldiers, sailors, airmen and Marines will opt for civilian career choices, not because they don't love what they do, but because their families just can no longer take the stress.

On the recruiting front, one only needs to watch prime-time television to see powerful marketing efforts on the part of the Services. But this strong marketing must be backed up by an ability to retain these experienced and talented men and women. This is especially true as the Services become more and more reliant on technically trained personnel. Congress reacted to retention problems by improving military compensation elements. But we also understand the pressures to reduce spending and the challenges associated with proposed defense budget increases. The truth remains that the finest weapon systems in the world are of little use if the Services don't have enough high quality, well-trained people to operate, maintain and support them.

The subcommittee's key challenge will be to ease servicemembers' debilitating workload stress and continue to build on the foundation of trust that you have established over the past 4 years—a trust that is being strained by years of disproportional sacrifice. Meeting this challenge will require a reasonable commitment of resources on several fronts.

Personnel Strengths and Operations Tempo.—The Coalition has noted with disappointment the Department of Defense's resistance to accept Congress's repeated offers to permanently increase Service end strength to relieve the stress on today's armed forces, which are clearly sustaining a wearing operations tempo fighting today's global war on terror. While we are encouraged by the subcommittee's support for increased Army and Marine Corps end strength, we are deeply concerned that administration-proposed plans for temporary manpower increases rely too heavily on continuation of stop-loss policies, unrealistic retention assumptions, overuse of the Guard and Reserves, optimistic scenarios in Southwest Asia, and the absence of new contingency needs.

While the Department's transformation vision is an understandable and necessary plan, its implementation will take a long time—time that is taking its toll after years of extraordinary operational tempo that is exhausting our downsized forces.

The Joint Chiefs testified that their forces were stressed before 9/11, and end strength should have been increased then. Now, almost 4 years later, heavily engaged in two major operations with no end in sight, massive Guard and Reserve mobilizations, and implementation of "stop-loss" policies, action to provide substantial relief is late and short of the need. Especially noteworthy is a recent memorandum detailing serious Army Reserve readiness concerns referencing the Reserves as "rapidly degenerating into a broken force."

Administration and military leaders warn of a long-term mission against terrorism that requires sustained, large deployments to Central Asia and elsewhere. The Services simply do not have sufficient numbers to sustain the global war on terrorism, deployments, training exercises and other commitments, even with the recall of large numbers of Guard and Reserve personnel. Service leaders have tried to alleviate the situation by reorganizing deployable units, authorizing "family down time" following redeployment, or other laudable initiatives, but such things do little to eliminate long-term workload or training backlogs, and pale in the face of ever-

increasing mission requirements. For too many years, there has always been another major contingency coming, on top of all the existing ones. If the administration does not recognize when extra missions exceed the capacity to perform them, Congress must assume that obligation.

Some argue that increasing end strengths wouldn't help the situation, questioning whether the Services will be able to meet higher recruiting goals. The Coalition believes strongly that this difficult problem can and must be addressed as an urgent national priority, with increases in recruiting budgets as necessary.

Others point to high reenlistment rates in deployed units in certain Services as evidence that high operations tempo actually improves morale. But much of the reenlistment rate anomaly is attributable to tax incentives that encourage members to accelerate or defer reenlistment to ensure this occurs in a combat zone, so that any reenlistment bonus will be tax-free. Retention statistics are also skewed by stop-loss policies. Experience has shown time and again that family separation is the single greatest retention disincentive. The Military Coalition believes that those who ignore this and argue there is no retention problem are "whistling past the graveyard."

The Military Coalition strongly recommends additional funding for permanent end strength increases to sustain the long-term global war on terrorism and fulfill national military strategy. The Coalition supports increases in recruiting resources as necessary to meet this requirement and ease operational stresses on active, Guard and Reserve personnel.

Accession and Retention Bonuses.—In the interim, maintaining and increasing accession and retention bonuses is crucial to meet manning requirements. The Services have requested increased bonus authority and special pay authority, as well as more flexible authorities, to meet specific manning, retention and assignment needs. The Coalition strongly supports these efforts and hopes the Subcommittee will provide the full funding needed to sustain these critical programs.

The Military Coalition strongly recommends additional funding to increase accession and retention bonuses.

Combat and Incentive Pays During Hospitalization.—The Coalition is concerned that current eligibility rules for combat zone compensation programs are insensitive to the circumstances of wounded members during hospitalization and rehabilitation.

Members assigned to combat zones, as well as those performing hazardous duty elsewhere, are eligible for additional compensation because the country recognizes the increased risk to life and limb entailed in such duty. Yet the members who are injured or wounded lose eligibility for hazardous duty/combat incentive programs during their hospitalization and recovery from their injuries. In many cases, this recovery can take months, and their families may be subject to additional expenses because of their incapacity.

If we acknowledge that members deserve these extra pays for incurring the risk inherent in a combat zone, we should also acknowledge an obligation to continue such pays for those who actually incur combat injuries until they can be returned to duty, retired, or separated.

The Military Coalition strongly urges the subcommittee to take action to ensure servicemembers injured or wounded as a result of hazardous duty/combat do not have their compensation reduced during periods of hospitalization. The Coalition believes funding support is essential to sustain compensation for servicemembers who continue to suffer from the wounds and injuries these incentive programs were created to recognize.

Commissaries.—The Coalition is committed to preserving the value of the commissary benefit—which is widely recognized as the cornerstone of quality of life benefits and a valued part of servicemembers' total compensation package.

In the fiscal year 2005 Defense Authorization Act, Congress enacted stronger statutory protections for the commissary and exchange systems.

The Coalition supports cost savings through effective oversight and management. However, we are concerned about the unrelenting pressure on the Defense Commissary Agency to cut spending and squeeze additional efficiencies from its operations—despite years of effective reform initiatives and recognition of the agency for instituting improved business practices.

The commissary is a highly valued quality of life benefit whose savings and retention value for military members far exceeds the appropriated amount.

The Military Coalition opposes initiatives that would reduce Commissary benefits or savings for members, and strongly supports full funding of the benefit in fiscal year 2006 and beyond to sustain the current level of service for all patrons, including retirees, Guard and Reserve personnel, and their families.

Family Readiness and Support.—Today, two-thirds of active duty families and virtually all Guard and Reserve families live off military installations, and approxi-

mately 60 percent of these servicemembers are married. A fully funded family readiness program to include financial education and benefit information has never been a more crucial component to the military mission and overall readiness than it is today.

More needs to be done to “connect” servicemembers and their families with important resources. A more aggressive outreach effort is needed to educate servicemembers and their families on the benefits and programs to which they are entitled. A systematic and integrated family support system will help families cope with the stresses of deployment and the demands of military life. Addressing such issues as childcare, spousal employment/education, flexible spending accounts, increases in SGLI, and other quality of life concerns will go a long way in enhancing family well-being and improving retention and morale of the force.

The Military Coalition urges additional funding for improved family readiness through further education and outreach programs and increased childcare availability for servicemembers and their families and associated support structure to assist families left behind during deployments of active duty, Guard and Reserve members.

Death Benefits Enhancement.—Military insurance and death gratuity fall short of what is needed when measured by private sector standards for employees in hazardous occupations.

The fiscal year 2005 Emergency Supplemental Appropriations Act will increase the death gratuity and upgrade military life insurance programs. Continued funding for these significant upgrades is essential for fiscal year 2006 and the out years.

The Military Coalition urges the subcommittee to fully fund military death benefits improvements.

NATIONAL GUARD AND RESERVE ISSUES

More than 473,000 members of the National Guard and Reserve have been mobilized since September 11, 2001, and many thousands more are in the activation pipeline. Today, they face the same challenges as their active counterparts, with a deployment pace greater than any time since World War II.

Guard/Reserve operational tempo has placed enormous strains on reservists, their family members and their civilian employers alike. Homeland defense and war-on-terror operations continue to place demands on citizen soldiers that were never anticipated under the “Total Force” policy. The Coalition understands and fully supports that policy and the prominent role of the Guard and Reserve forces in the national security equation.

However, many Guard and Reserve members are facing increased financial burdens under the current policy of multiple extended activations over the course of a reserve career. Some senior reserve leaders are rightly alarmed over likely manpower losses if action is not taken to relieve pressures on Guard and Reserve troops. The Coalition believes that addressing critical Guard and Reserve pay, bonuses, benefits and entitlements issues—along with active duty manpower increases—are needed to alleviate those pressures and help retain these qualified, trained professionals.

Healthcare for Members of the National Guard and Reserve.—The Military Coalition is very grateful that Congress established the “TRICARE Reserve Select” health benefit in the fiscal year 2005 National Defense Authorization Act. This new authority—along with permanent pre- and post- activation TRICARE coverage—will help address the needs of Guard and Reserve families in the call-up pipeline. We anticipate that further improvements in this program are likely to be forthcoming in the fiscal year 2006 Defense Authorization Act.

More specifically, with the increasing rate of utilization for all areas of our Reserve Components increasing, we feel that Congress must act to provide increased health care benefits for all our country’s Guardsmen, Reservists, and their families, to guarantee the Nation can continue to call on them.

It is our strong recommendation that we must provide and fund a permanent TRICARE program on a cost-share basis for our members of the Guard and Reserve components who are being mobilized and deployed at increasing rates.

Seventy percent of Guard and Reserve members have employer-sponsored health insurance. The Coalition believes this is not a “one size fits all” population. Usage of the TRICARE benefit when the servicemember is activated may not be the best way to ensure continuity of care for some families. As an option for these servicemembers, the Coalition urges Congress to take action to have the government pay part or all of private health insurance premiums when activation occurs, a program already in effect for reservists who work for the Department of Defense.

The Military Coalition recommends funding to allow permanent authorization of cost-share access to TRICARE for all members of the Selected Reserve and IRR members subject to activation under Presidential call-up authority, to support readiness, family morale, and deployment health preparedness.

Eliminate BAH II.—BAH II is paid to Guard and Reserve members in lieu of regular BAH (Basic Allowance for Housing) who are on orders of less than 140 days. BAH II is an antiquated standard that no longer bears any relation to real housing expenses and is, on average, far less than the BAH rate for any given locality. There is an exception to this rule that applies, by public law, for those called up for a contingency operation. The Coalition believes strongly that any member activated for 30 days or more should be eligible for locality-based BAH.

The Military Coalition urges appropriation of funding to permit payment of locality-based BAH to all Guard and Reserve members mobilized for 30 days or more.

Family Support Programs.—Providing a core set of family programs and benefits that meet the unique needs of these families would go a long way in improving morale and meeting family readiness challenges.

These programs would promote better communication with servicemembers, specialized support for geographically separated Guard and Reserve families, and training (and back-up) for family readiness volunteers. Such access would include:

- Expansion of web-based programs and employee and family assistance programs like Military One Source and Guard Family.org;
- Enforcement of command responsibility for ensuring that programs are in place to meet the special information and support needs of Guard/Reserve families;
- Expanded programs between military and community religious leaders to support service members and families during all phases of deployments;
- The availability of robust preventative counseling services for service members and families and training so they know when to seek professional help related to their circumstances;
- Enhanced education for Reserve component family members about their rights and benefits;
- Innovative and effective ways to meet Reserve component community needs for occasional child care, particularly for preventative respite care, volunteering, family readiness group meetings and drill time; and,
- A joint family readiness program to facilitate understanding and sharing of information between all family members, no matter what the service.

We applaud the support shown to families by DOD and military and civilian community organizations. But with the continued and sustained activation of the Reserve Component, a stronger support structure needs to be implemented, funded, and sustained.

The Military Coalition urges Congress to increase funding for military family support programs to meet the unique needs of the families of mobilized Guard and Reserve component members.

HEALTH CARE

The Military Coalition (TMC) is most appreciative of the subcommittee's efforts to honor the government's health care commitments to all uniformed services beneficiaries. While much has been accomplished, we are equally concerned about making sure that subcommittee-directed changes are implemented and the desired positive effects actually achieved.

FULL FUNDING FOR THE DEFENSE HEALTH BUDGET

Once again, a top Coalition priority is to work with Congress and DOD to ensure full funding of the Defense Health Budget to meet readiness needs—including graduate medical education and continuing education, full funding of both direct care and purchased care sectors, providing access to the military health care system for all uniformed services beneficiaries, regardless of age, status or location. An underfunded Defense Health Program inevitably compromises the capability to deliver desired levels of quality care and undermines the health care benefits military beneficiaries have earned. A fully funded health care benefit is critical to readiness and the retention of qualified uniformed service personnel.

The subcommittee's continued oversight of the defense health budget is essential to avoid a return to the chronic under funding of recent years that led to execution shortfalls, shortchanging of the direct care system, inadequate equipment capitalization, failure to invest in infrastructure, curtailed drug formularies, and reliance on annual emergency supplemental funding requests as a substitute for candid and conscientious budget planning. We are grateful that once again late last year, Congress provided \$683 million supplemental appropriations to meet the last quarter's

obligations—but not all of the growing requirements in support of the deployment of forces to Southwest Asia and Afghanistan in the global war against terrorism.

The Coalition is hopeful that fiscal year 2006 funding levels will not fall short of current obligations. We fear that additional supplemental funding will once again be required. Last year, citing budgetary restraints, the Air Force made a unilateral decision to remove certain drugs from military treatment facility (MTF) formularies. We appreciate that these are extremely challenging budget times for MTF commanders; however, we are greatly concerned that this budget-driven action undermined the deliberative process by which the Uniform Formulary must be developed.

In addition, this policy forced increased use of mail-order and retail pharmacy programs, and thus increased costs to both DOD and beneficiaries; inappropriately made budget considerations the primary driver of formulary limits; and imposed regrettable inter-service disparities in pharmacy benefits.

Health care requirements for members returning from the GWOT are also expected to continue to strain the military delivery system in ways that may not have been anticipated in the budgeting process. Similarly, implementation of the TRICARE Standard requirements in the fiscal year 2004 Authorization Act—particularly those requiring actions to attract more TRICARE providers—will almost certainly require additional resources that we do not believe are being budgeted for. Financial support for these increased readiness requirements; TRICARE provider shortfalls and other needs will most likely require additional funding.

At the January 2005 TRICARE Conference, Assistant Secretary Winkenwerder said that funding for fiscal years 2006 and 2007 was adequate. However, he went on to state, “looking to the longer term, I’m candidly concerned.” At the same conference Air Force Chief of Staff Gen. John Jumper said that the health system faces an \$11 billion shortfall over the next few years.

The Military Coalition strongly recommends the subcommittee ensure full funding of the Defense Health Program, including military medical readiness, needed TRICARE Standard improvements, and the DOD peacetime health care mission. It is critical that the Defense Health Budget be sufficient to secure increased numbers of providers needed to ensure access for TRICARE beneficiaries in all parts of the country.

TRICARE ISSUES

Provider Reimbursement.—The Coalition appreciates Congress’s efforts to address provider reimbursement needs in the fiscal year 2004 NDAA (Public Law 108–136). We recognize that part of the problem is endemic to the flawed Medicare reimbursement system, to which TRICARE rates are directly tied.

The Coalition is troubled to note that a flaw in the provider reimbursement formula led the Centers for Medicare and Medicaid (CMS) to propose cutting Medicare fees in recent years, which were only forestalled by last-minute legislative relief. While the Coalition is grateful for Congress’s temporary fixes, the reimbursement formula remains broken.

Once again, the Coalition wishes to bring to the subcommittee’s attention that the 2004 report of the Medicare Trustees predicts 5 percent annual cuts in Medicare reimbursements to providers for 2006 through 2012. However, MedPAC has recommended raising Medicare’s physician payment rate by 2.7 percent in 2006, stating that a “small but consistent share” of beneficiaries have experienced some difficulty in accessing providers.

Cuts in Medicare (and thus TRICARE) provider payments, on top of providers’ increasing overhead costs and rapidly rising medical liability expenses, seriously jeopardizes providers’ willingness to participate in both these programs. Provider resistance is much more pronounced for TRICARE than Medicare for a variety of social, workload, and administrative reasons. Provider groups tell us that TRICARE is seen as the lowest-paying program they deal with, and often causes them the most administrative problems. This is a terrible combination of perceptions if you are a TRICARE Standard patient trying to find a doctor.

For patients in Prime the situation is growing increasingly problematic as deployments of large numbers of military health professionals continue to diminish the capacity of the military’s direct health care system. In this situation, more and more TRICARE patients have to turn to the purchased care sector—thus putting more demands on civilian providers who are reluctant to take an even larger number of beneficiaries with relatively low-paying TRICARE coverage.

The Coalition firmly believes this is a readiness issue. Our deployed service men and women need to focus on their mission, without having to worry whether their family members back home can find a provider. Uniformed services beneficiaries deserve the Nation’s best health care, not the cheapest.

Congress did the right thing by reversing the proposed provider payment cuts previously planned for March 1, 2003 and January 1, 2004, and instead providing 1.6 percent and 1.5 percent payment increases respectively. Unless Congress or the administration acts soon, effective next year, providers will have to absorb a 5 percent cut for TRICARE patients as well as Medicare patients. More importantly, the underlying formula needs to be fixed to eliminate the need for perennial “band-aid” corrections.

The Military Coalition requests the subcommittee’s support of any means to stabilize, maintain and fund Medicare and TRICARE provider payment rates to ensure beneficiary access.

CONCLUSION

The Military Coalition reiterates its profound gratitude for the extraordinary progress this subcommittee has made in advancing a wide range of personnel and health care initiatives for all uniformed services personnel and their families and survivors. The Coalition is eager to work with the subcommittee in pursuit of the goals outlined in our testimony. Thank you very much for the opportunity to present the Coalition’s views on these critically important topics.

PREPARED STATEMENT OF THE NAVAL RESERVE ASSOCIATION

Chairman Stevens, Senator Inouye and distinguished members of the subcommittee, on behalf of our 22,000 members, and in advocacy for the 80,000 active Naval Reservists and the mirrored interest of Guard and Reserve personnel, we are grateful for the opportunity to submit testimony, and for your efforts in this hearing.

We very much appreciate the efforts of this subcommittee, the full committee on Appropriations and like committees in the House of Representatives to support our deployed personnel and their families. Your willingness to address and correct issues facing Guardsmen and Reservists affirms their value to the defense of our great Nation. Your recognition of these men and women as equal partners in time of war stands you well in the eyes of many. Our young Naval Reservists indicate to us that they are watching and waiting to see our actions to address their concerns. Your willingness to look at issues related to the use of the Guard and Reserve on the basis of fairness sets the Legislative Branch well above the Executive Branch which seemingly develops its positions on the basis of cost.

That said, there are issues that need to be addressed by this committee and this Congress.

Recruiting and retention issues are moving to center stage for all services and their reserve components. In all likelihood the Navy will not meet its target for 13,000 new Naval Reservists and the Naval Reserve will be challenged to appreciably slow the departure of 17,000 experienced personnel this fiscal year. Other services and their Reserve Components likely face these same challenges.

We believe that Congress and this committee should give the services the tools targeted to mid-career personnel in the Guard and Reserve: (1) appropriate critical skills bonuses for Guardsmen and Reservists (G&R) that would provide \$100,000 over an entire career (no authorization exists for G&R personnel while one with a \$200,000 limit exists for active duty personnel); (2) increase affiliation bonuses to \$15,000 to attract veterans; (3) restore the Reserve MGIB to 50 percent of the active duty entitlement (presently at 28 percent) and make it available throughout a career; (4) Provide the resources to maintain Navy Reserve end strength at 66,000 Selected Reservists and 13,500 for FTS personnel; and (5) Provide supportive language that provides for an earlier than age 60 retirement.

We’ve heard that Reserve Chiefs are in agreement, expressing concern that senior personnel will leave in droves. Hopefully this is more than conscript thinking. A compromise solution to this earlier than age 60 retirement issue is something modeled after Social Security—if you take reserve retirement as early as age 55 you do so with a greatly reduced annuity for life. This NRA-conceived proposal would significantly reduce the estimated costs to the government over other plans being proposed. The money has been accrued; the costs then would be those associated with administering monthly payments earlier than expected and any lost interest on the accrued amount. The greatly reduced annuity for life may very well serve as a disincentive to early retirement for the senior leaders who truly have upwardly mobile careers.

We ask you to fund Navy Reserve equipment in the NGREA accounts, including an additional C-40 aircraft that is critical for supporting Reserve forces in today’s Global War on Terrorism. The Navy Reserve is downsizing. Naval Reserve units are

engaged in this Global War, and these units, the people, and their families are responding to Combatant Commanders calls. We must maintain the proper equipment for these Navy Reserve units and Navy Reserve Sailors. The AC will not do it, yet will call on them to respond. Only through the NGREA will your citizen-Sailors be able to respond to the needs of the Nation and Combatant Commanders.

These recommendations are relevant to the needs of the services today, and to the future readiness of the Nation. The last two issues (end-strength cap) and (early retirement) are on the minds of many Guardsmen and Reservists. We urge you to address these issues as our young Sailors are very concerned about these issues, and what it means to their long term service.

In summary, we believe the committee needs to address the following issues for our Guardsman and Reservists in the best interest of our National Security:

- Increase funding for Naval Reserve equipment in NGREA
- Address and authorize recruitment and retention issues:
 - Authorize critical skills bonuses for Guardsmen and Reservists—\$100,000 over an entire career
 - Increase affiliation bonuses to \$15,000 to attract veterans
 - Restore Reserve MGIB to 50 percent of the active duty entitlement
- Establish 79,500 SelRes (66,000) and FTS (13,500) as a floor for end strength to Navy Reserve manpower—providing for surge-ability and operational support
- Substantiate that Navy Reserve equipment remain a part of the Chief of Naval Reserve inventory
- Reduce annuity for reserve retirement before age 60 is a retention issue, and must be addressed by this Congress.

For Navy Reserve NGREA accounts we recommend the following: (1) C-40 Procurement—procure 1 additional C-40 for fiscal year 2006; (2) Equipment for Naval Coastal Warfare/Small Arms—Emerging GWOT requirement EOD/NCW equipment for Naval Coastal Warfare units; (3) Reserve Requirements—for activation—Funds associated for Reservist mobilize for GWOT.

The above are a part of the Navy's unfunded list; however, there are other items that must be addressed in the NGREA account. Guard and Reserve Components still need the funding Congress provides through this means.

We thank the committee for consideration of these tools to assist the Guard and Reserve in an age of increased sacrifice and utilization of these forces.

PREPARED STATEMENT OF NEUROFIBROMATOSIS, INC.—NEW ENGLAND

Thank you, Mr. Chairman, for the opportunity to present testimony to the subcommittee on the importance of continued funding for Neurofibromatosis (NF), a terrible genetic disorder directly associated with military purposes and closely linked too many common diseases widespread among the American population.

I am Naomi Stonberg, representing Neurofibromatosis, Inc., New England which is a participant in a national coalition of NF advocacy groups. I am actively involved in creating awareness of NF and promoting scientific research in this area. I am here on behalf of the 100,000 Americans who suffer from NF, including my daughter and nephew, as well as approximately 175 million Americans who suffer from diseases linked to NF, including some of the most common forms of cancer, brain tumors, congenital heart disease, hypertension, memory loss and learning disabilities.

Mr. Chairman, I am requesting increased support, in the amount of \$25 million, to continue the Army's highly successful NF Research Program (NFRP), which is now at the critical point of establishing a nation-wide clinical trials consortia. The program's great success can be seen in the commencement of clinical trials only 10 years since the discovery of the NF1 gene. Now, with NF in the expensive but critical era of clinical and translational research, scientists closely involved with the Army program have stated that the number of high-quality scientific applications justify a much larger program.

WHAT IS NEUROFIBROMATOSIS (NF)?

NF is a genetic disorder involving the uncontrolled growth of tumors along the nervous system which can result in terrible disfigurement, deformity, deafness, blindness, brain tumors, cancer, and/or death. NF can also cause other abnormalities such as unsightly benign tumors across the entire body and bone deformities. In addition, approximately one-half of children with NF suffer from learning disabilities. NF is the most common neurological disorder caused by a single gene. While not all NF patients suffer from the most severe symptoms, all NF patients and their families live with the uncertainty of not knowing whether they will be seriously affected one day because NF is a highly variable and progressive disease.

Approximately 100,000 Americans have NF. It appears in approximately one in every 3,500 births and strikes worldwide, without regard to gender, race or ethnicity. It is estimated that 50 percent of new cases result from a spontaneous mutation in an individual's genes and 50 percent are inherited. There are two types of NF: NF1, which is more common, and NF2, which primarily involves acoustic neuromas and other tumors, causing deafness and balance problems. Advances in NF research will benefit over 175 million Americans in this generation alone because NF is directly linked to many of the most common diseases affecting the general population, as indicated above.

NF'S CONNECTION TO THE MILITARY

NF research is directly linked to military purposes because NF is closely linked to cancer, brain tumors, memory loss, learning disabilities, heart disease, brain tissue degeneration, nervous system degeneration, healing after wounding, deafness, and balance. Because NF manifests itself in the nervous system, this subcommittee, in past Report language, has stated that Army-supported research on NF includes important investigations into genetic mechanisms governing peripheral nerve regeneration after injury from such things as missile wounds and chemical toxins. For the same reason, this subcommittee also stated that NF may be relevant to understanding Gulf War Syndrome and to gaining a better understanding of wound healing. Today, NF research now includes important investigations into genetic mechanisms which involve not just the nervous system but also other cancers.

LINK TO OTHER ILLNESSES

Researchers have determined that NF is closely linked to cancer, heart disease, learning disabilities, memory loss, brain tumors, and other disorders including deafness, blindness and orthopedic disorders, primarily because NF regulates important pathways common to these other disorders such as the RAS, cAMP and PAK pathways. Research on NF therefore stands to benefit millions of Americans.

Cancer.—Research has demonstrated that NF's tumor suppressor protein, neurofibromin, inhibits RAS, one of the major malignancy causing growth proteins involved in 30 percent of all cancer. Accordingly, advances in NF research may well lead to treatments and cures not only for NF patients but for all those who suffer from cancer and tumor-related disorders. Similar studies have also linked epidermal growth factor receptor (EGF-R) to malignant peripheral nerve sheath tumors (MPNSTs), a form of cancer which disproportionately strikes NF patients.

Heart disease.—Researchers have demonstrated that mice completely lacking in NF1 have congenital heart disease that involves the endocardial cushions which form in the valves of the heart. This is because the same ras involved in cancer also causes heart valves to close. Neurofibromin, the protein produced by a normal NF1 gene, suppresses ras, thus opening up the heart valve. Promising new research has also connected NF1 to cells lining the blood vessels of the heart, with implications for other vascular disorders including hypertension, which affects approximately 50 million Americans. Researchers believe that further understanding of how an NF1 deficiency leads to heart disease may help to unravel molecular pathways affected in genetic and environmental causes of heart disease.

Memory Loss and Learning Disabilities.—Because NF regulates and controls pathways vital to cognition, the RAS and the cyclic AMP pathways, researchers have determined that NF is directly linked to memory loss and learning disabilities affecting over 25 million and 35 million Americans respectively. Indeed, 5 percent of the world's population suffers from learning disabilities alone. NF researchers have successfully rescued learning deficits, including memory loss and learning disabilities, in pre-clinical animal models, which will benefit all people suffering from these conditions, not just those with NF. In addition, by curing learning disabilities, Federal, State, and local governments and school districts will save billions of dollars in special education costs.

Deafness.—NF2 accounts for approximately 5 percent of genetic forms of deafness. It is also related to other types of tumors, including schwannomas and meningiomas, as well as being a major cause of balance problems.

THE ARMY'S CONTRIBUTION TO NF RESEARCH

Recognizing NF's importance to both the military and to the general population, Congress has given the Army's NF Research Program strong bipartisan support. After the initial 3-year grants were successfully completed, Congress appropriated continued funding for the Army NF Research Program on an annual basis. From fiscal year 1996 through fiscal year 2005, this funding has amounted to \$155.3 million, in addition to the original \$8 million appropriation in fiscal year 1992. Between

fiscal year 1996 and fiscal year 2004, 138 awards have been granted to researchers across the country. The Army program funds innovative, groundbreaking research which would not otherwise have been pursued, and has produced major advances in NF research, such as the development of advanced animal models, preclinical therapeutic experimentation and clinical trials. The program has brought new researchers into the field of NF, as can be seen by the nearly 60 percent increase in applications in the past year alone. Unfortunately, despite this increase, the number of awards has remained relatively constant over the past couple of years resulting in many highly qualified applications going unfunded. Army officials administering this program have indicated in the past that they could easily fund 30 percent more applications if funding were available because of the high quality of the research applications received.

In order to ensure maximum efficiency, the Army collaborates closely with other Federal agencies that are involved in NF research, such as NIH and the VA. Senior program staff from the National Cancer Institute (NCI) and the National Institute of Neurological Disorders and Stroke (NINDS), for example, has sat on the Army's NF Research Program's Integration Panel which sets the long-term vision and funding strategies for the program. This assures the highest scientific standard for research funding, efficiency and coordination while avoiding duplication or overlapping of research efforts.

Because of the enormous advances that have been made as a result of the Army's NF Research Program, research in NF has truly become one of the great success stories in the current revolution in molecular genetics, leading one major researcher to conclude that more is known about NF genetically than any other disease. Accordingly, many medical researchers believe that NF should serve as a model to study all diseases. Indeed, in just over a dozen years since the discovery of the NF1 gene, researchers have successfully cured both NF's cognitive and tumor disorders in mice, have successfully removed NF tumors in at least one clinical trial involving human patients and are now on the threshold of developing a treatment and cure for this terrible disease.

In just the past few years, scientists have made major breakthroughs bringing NF fully into the translational era, with treatments close at hand. These recent advances have included:

- Phase II and Phase III clinical trials involving new drug therapies;
- Creation of a National Clinical Trials Consortia and NF Centers;
- Successfully eliminating tumors in NF1 and NF2 mice with the same drug;
- Developing advanced mouse models showing human symptoms;
- Rescuing learning deficits and eliminating tumors in mice with the same drug;
- Linking NF to vascular disorders such as congenital heart disease and hypertension, affecting more than 50 million Americans; and
- Conducting natural history studies to analyze the progression of the disease.

FUTURE DIRECTIONS

NF research has now advanced to the translational and clinical stages which hold incredible promise for NF patients, as well as for patients who suffer from many of the diseases linked to NF. This research is costly and will require an increased commitment on the Federal level. Specifically, future investment in the following areas would continue to advance research on NF:

- Clinical trials;
- Funding of a clinical trials network to connect patients with experimental therapies;
- Development of NF Centers, tissue banks, and patient registries;
- Development of new drug and genetic therapies;
- Further development of advanced animal models;
- Expansion of biochemical research on the functions of the NF gene and discovery of new targets for drug therapy; and
- Natural history studies and identification of modifier genes—studies are already underway to provide a baseline for testing potential therapies and differentiate among different phenotypes of NF.

FISCAL YEAR 2006 REQUEST

Mr. Chairman, the Army's highly successful NF Research Program has shown tangible results and direct military application with broad implications for the general population. The program has now advanced to the translational and clinical research stages, which are the most promising, yet the most expensive direction that NF research has taken. The program has succeeded in its mission to bring new researchers and new approaches to research into the field. Therefore, increased fund-

ing is now needed to take advantage of promising avenues of investigation, to continue to build on the successes of this program, and to fund this promising research thereby continuing the enormous return on the taxpayers' investment.

I respectfully request an appropriation of \$25 million in your fiscal year 2006 Department of Defense Appropriations bill for the Army Neurofibromatosis Research Program. This is level funding from the fiscal year 2005 level of \$25 million.

Mr. Chairman, in addition to providing a clear military benefit, the DOD's Neurofibromatosis Research Program also provides hope for the 100,000 Americans who suffer from NF, as well as the tens of millions of Americans who suffer from NF's related diseases such as cancer, learning disabilities, memory loss, heart disease, and brain tumors. Leading researchers now believe that we are on the threshold of a treatment and a cure for this terrible disease. With this subcommittee's continued support, we will prevail.

Thank you for your support of this program and I appreciate the opportunity to present this testimony to the subcommittee.

CONCLUSION OF HEARINGS

Senator STEVENS. This subcommittee will reconvene again tomorrow morning at 10 a.m. for a closed session to review the fiscal year 2006 defense intelligence budget. We will stand in recess until that time.

[Whereupon, at 4:58 p.m., Tuesday, May 17, the hearings were concluded, and the subcommittee was recessed, to reconvene subject to the call of the Chair.]